

REPORTER

Start from 1 and add/subtract

$$1 + 3.4 + 1.5 - 0 = 7$$



SCORESHEET

Stage: 1 Fight 2 A, Problem: 4

Signature: *Thomas Lindner*

Lindner, Thomas

Russia:

BRG APP Innsbruck:

BG/BRG Villach 1:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 too few	poor	0 concise and correct or no questions asked
1 some	some	some	some	review of sources, cited	partly	<input checked="" type="checkbox"/> partly clear	<input checked="" type="checkbox"/> some	some aspects fine	<input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2 <input checked="" type="checkbox"/> fair	fair	fair	not well fitting	some own input	average	average	1 many	<input checked="" type="checkbox"/> good	<input checked="" type="checkbox"/> some incorrect, inconclusive or too long
3 good	<input checked="" type="checkbox"/> good	well performed, sufficient number	<input checked="" type="checkbox"/> deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	2 + data/theory convincingly supported	some aspects efficient	<input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	3 proved deep understanding	overall efficient	
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 4.5 + 2 - 0 = 6$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant		0 almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 concise and correct or no questions asked
1 <input checked="" type="checkbox"/> relevant, aimed at resolving unclear points in the report		1 some main points	few	some	some	reasonable	1 few	<input checked="" type="checkbox"/> some	some aspects fine	<input checked="" type="checkbox"/> some	<input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2 + short, apt and clear, well prioritized, all time used		2 <input checked="" type="checkbox"/> main points	<input checked="" type="checkbox"/> some	<input checked="" type="checkbox"/> some correct	<input checked="" type="checkbox"/> reasonable	fair	2 some	some correct	<input checked="" type="checkbox"/> good	reasonable	<input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
		3 all relevant points	many	many correct	fair	efficient	3 <input checked="" type="checkbox"/> good	many correct	some aspects efficient	fair	
		4 practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 1 + 1 + 0.5 - 0 = 5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant		0 poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 concise and correct or no questions asked
1 relevant, meant to clarify unclear points		1 <input checked="" type="checkbox"/> partial	<input checked="" type="checkbox"/> partially relevant	<input checked="" type="checkbox"/> some	1 too short/long	partially relevant	some	1 too short/long	<input checked="" type="checkbox"/> some	0 none	<input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2 + suitably allotted to Rep & Opp, most time used		2 good	mostly adequate	reasonable	2 informative, apt	mostly adequate	reasonable	2 relevant parts	many	1 relevant, constructive	<input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
3 + short, apt and clear, well prioritized, time managed efficiently		3 detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate		

NOTES:

REPORTER

Start from 1 and add/subtract

$$1 + 4 + 1 - 0 = 6$$



SCORESHEET

Stage: 1 Fight 2 A, Problem: 4

Russia: ~~Viktor~~ Trubidin
Nikita

sign

Grillenbeck

Grillenbeck, Thomas

BRG APP Innsbruck: Luca Entenob
BG/BRG Villach 1: Rehan Valis

REPORT								DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	too few	poor	0 <input checked="" type="checkbox"/> concise and correct or no questions asked 1 <input type="checkbox"/> some incorrect, inconclusive or too long -1 <input type="checkbox"/> deeply incorrect or show deep misconceptions -2 <input type="checkbox"/>
1	some	some	some	some	review of sources, cited	partly	partly clear	some	some aspects fine	
2	fair	fair	fair	not well fitting	some own input	average	average	many	good	
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	+ data/theory convincingly supported	some aspects efficient	
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	proved deep understanding	overall efficient	
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			
6										
7										

NOTES:

OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 - 0 = 6$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0	too few, mostly irrelevant	almost nothing	no or irrelevant	too few	no	poor	almost no	too few	poor	no	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1	relevant, aimed at resolving unclear points in the report	some main points	few	some	some	reasonable	few	some	some aspects fine	some	1 <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2	+ short, apt and clear, well prioritized, all time used	main points	some	some correct	reasonable	fair	some	some correct	good	reasonable	2 <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
3		all relevant points	many	many correct	fair	efficient	good	many correct	some aspects efficient	fair	
4		practically all points	practically all	+ improvement suggestions	very good	+ all time used	new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 + 1 - 0 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0	too few, mostly irrelevant	poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	almost no	too few	-1 irrelevant	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1	relevant, meant to clarify unclear points	partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	0 <input checked="" type="checkbox"/> none	1 <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2	+ suitably allotted to Rep & Opp, most time used	good	mostly adequate	reasonable	informative, apt	mostly adequate	reasonable	relevant parts	many	1 relevant, constructive	2 <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
3	+ short, apt and clear, well prioritized, time managed efficiently	detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate		

NOTES:

no slides

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 1 Fight 2 A, Problem: 4

sign

(signature)

Kundracik, Frantisek

Russia:

BRG APP Innsbruck:

BG/BRG Villach 1:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 — almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 — too few	poor	0 — concise and correct or no questions asked
1 — some	some	some	some	review of sources, cited	partly	partly clear	1 — some	some aspects fine	
2 — fair	fair	fair	not well fitting	some own input	average	average	2 — many	good	-1 — some incorrect, inconclusive or too long
3 — good	good	well performed, sufficient number	deviations quantitatively analysed	+ some interesting results	some aspects above average	some parts well done	3 — + data/theory convincingly supported	some aspects efficient	
4 — detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	4 — proved deep understanding	overall efficient	-2 — deeply incorrect or show deep misconceptions
5 — deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

OPPONENT

Start from 1 and add/subtract

$$1 + 2 + 2 + 2 - 0 = 7$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 — too few, mostly irrelevant		almost nothing	no or irrelevant	too few	no	poor	0 — almost no	too few	poor	no	0 — concise and correct or no questions asked
1 — relevant, aimed at resolving unclear points in the report		some main points	few	some	some	reasonable	1 — few	some	some aspects fine	some	
2 — + short, apt and clear, well prioritized, all time used		main points	some	some correct	reasonable	fair	2 — some	some correct	good	reasonable	-1 — some incorrect, inconclusive or too long
		all relevant points	many	many correct	fair	efficient	3 — good	many correct	some aspects efficient	fair	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 — new crucial point(s)	+ improvement suggestions	overall efficient	very good	-2 — deeply incorrect or show deep misconceptions

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1.5 + 1 + 1.0 + 0 - 0 = 5.5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 — too few, mostly irrelevant		poor/wrong	irrelevant	no	0 — poor/wrong	irrelevant	no	0 — almost no	too few	0 — irrelevant	0 — concise and correct or no questions asked
1 — relevant, meant to clarify unclear points		partial	partially relevant	some	1 — too short/long	partially relevant	some	1 — too short/long	some		
2 — + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	2 — informative, apt	mostly adequate	reasonable	2 — relevant parts	many	1 — relevant, constructive	-1 — some incorrect, inconclusive or too long
3 — + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	3 — condensed & accurate	fully adequate	good	3 — accurate, conclusive	fully adequate		

NOTES:

too short

REPORTER

Start from 1 and add/subtract

$$1 + 4 + 1 - 0 = 6$$



SCORESHEET

Stage: 1 Fight 2 A, Problem:

Russia: *N. Trakibek*

sign

Mathelitsch

Mathelitsch, Leopold

BRG APP Innsbruck: *Z. B. BG/BRG Villach 1:*

N. Wale

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	+ data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 --- concise and correct or no questions asked
- 1 --- some incorrect, inconclusive or too long
- 2 --- deeply incorrect or show deep misconceptions

NOTES:

lack of knowledge of error bars + pressure movement

OPPONENT

Start from 1 and add/subtract

$$1 + 2 + 2 + 3 - 0 = 8$$

QUESTIONS ASKED

- 0 --- too few, mostly irrelevant
- 1 --- relevant, aimed at resolving unclear points in the report
- 2 --- + short, apt and clear, well prioritized, all time used

OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	main points	some	some correct	reasonable	fair
3	all relevant points	many	many correct	fair	efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	some	some correct	good	reasonable
3	good	many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 --- concise and correct or no questions asked
- 1 --- some incorrect, inconclusive or too long
- 2 --- deeply incorrect or show deep misconceptions

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 2 + 1 + 1 + 0 + 0 - 0 = 5$$

QUESTIONS ASKED

- 0 --- too few, mostly irrelevant
- 1 --- relevant, meant to clarify unclear points
- 2 --- + suitably allotted to Rep & Opp, most time used
- 3 --- + short, apt and clear, well prioritized, time managed efficiently

REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	partial	partially relevant	some
2	good	mostly adequate	reasonable
3	detailed, complex	fully adequate	good

REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	some
2	informative, apt	mostly adequate	reasonable
3	condensed & accurate	fully adequate	good

DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	almost no	too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

MISSED POINTS POINTED OUT

- 1 --- irrelevant
- 0 --- none
- 1 --- relevant, constructive

ANSWERS TO JURY QUESTIONS

- 0 --- concise and correct or no questions asked
- 1 --- some incorrect, inconclusive or too long
- 2 --- deeply incorrect or show deep misconceptions

NOTES:

+ Kowle

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 1 Fight 2 A, Problem: 4

sign

[Signature]

Weiß, Lisa

Russia: Report

BRG APP Innsbruck: Opponent BG/BRG Villach 1: Reviewer

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- unclear, chaotic	0 --- <u>too few</u>	0 --- <u>poor</u>	0 --- concise and correct or no questions asked
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- partly clear	1 --- some	1 --- <u>some aspects fine</u>	1 --- some incorrect, inconclusive or too long
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- average	2 --- many	2 --- good	2 --- deeply incorrect or show deep misconceptions
3 --- good	3 --- good	3 --- well performed, sufficient number	3 --- deviations qualitatively analysed	3 --- + some interesting results	3 --- some aspects above average	3 --- some parts well done	3 --- + data/theory convincingly supported	3 --- some aspects efficient	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained errors analysed	4 --- + theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- interesting solution	4 --- overall clear, demonstrative	4 --- proved deep understanding	4 --- overall efficient	
5 --- deep and comprehensible, shows physical insight	5 --- detailed, complex, completely testable	5 --- + reproducible, convincing analysis	5 --- well fitting, deviations analysed, conclusive	5 --- considerable experimental and theoretical	5 --- greater extent than expected	5 --- + complex concepts well communicated			

NOTES:

OPPONENT

Start from 1 and add/subtract

$$1 + 0,5 + 2,5 + \cancel{1,5} - 0 = \cancel{5,5} \rightarrow 7$$

QUESTIONS ASKED	OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 --- too few, mostly irrelevant	0 --- almost nothing	0 --- no or irrelevant	0 --- too few	0 --- no	0 --- poor	0 --- almost no	0 --- <u>too few</u>	0 --- poor	0 --- no	0 --- concise and correct or no questions asked
1 --- relevant, aimed at resolving unclear points in the report	1 --- some main points	1 --- few	1 --- some	1 --- some	1 --- reasonable	1 --- few	1 --- <u>some</u>	1 --- some aspects fine	1 --- <u>some</u>	1 --- some incorrect, inconclusive or too long
2 --- + short, apt and clear, well prioritized, all time used	2 --- main points	2 --- some	2 --- some correct	2 --- reasonable	2 --- fair	2 --- <u>good</u>	2 --- <u>some correct</u>	2 --- <u>good</u>	2 --- reasonable	2 --- deeply incorrect or show deep misconceptions
	3 --- all relevant points	3 --- many	3 --- many correct	3 --- fair	3 --- efficient	3 --- new crucial point(s)	3 --- + improvement suggestions	3 --- some aspects efficient	3 --- fair	
	4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- + all time used			4 --- overall efficient	4 --- very good	

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 1,2 + \cancel{1,5} + 1,5 + 1 \pm 0 - 0 = 7$$

QUESTIONS ASKED	REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
	report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 --- too few, mostly irrelevant	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- almost no	0 --- too few	-1 --- irrelevant	0 --- concise and correct or no questions asked
1 --- relevant, meant to clarify unclear points	1 --- partial	1 --- partially relevant	1 --- some	1 --- <u>too short/long</u>	1 --- <u>partially relevant</u>	1 --- some	1 --- <u>too short/long</u>	1 --- <u>some</u>	0 --- none	1 --- some incorrect, inconclusive or too long
2 --- + suitably allotted to Rep & Opp, most time used	2 --- <u>good</u>	2 --- <u>mostly adequate</u>	2 --- <u>reasonable</u>	2 --- informative, apt	2 --- mostly adequate	2 --- <u>reasonable</u>	2 --- <u>relevant parts</u>	2 --- many	1 --- relevant, constructive	2 --- deeply incorrect or show deep misconceptions
3 --- + short, apt and clear, well prioritized, time managed efficiently	3 --- detailed, complex	3 --- fully adequate	3 --- good	3 --- condensed & accurate	3 --- fully adequate	3 --- good	3 --- accurate, conclusive	3 --- fully adequate		

NOTES:

REPORTER

Start from 1 and add/subtract

$$1 + 3 + 1 - 0.5 = 5$$



SCORESHEET

Stage: 1 Fight 2 A, Problem:

Russia: T. Nikita

BRG APP Innsbruck:

BG/BRG Villach 1:

Zajki-Zechmeister, Krisztina

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	0 almost no	0 too few	0 no/ almost no	0 others' data, incorrectly cited	0 misunderstood	0 unclear, chaotic	0 too few	0 poor	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 some	1 some	1 some	1 some	1 review of sources, cited	1 partly	1 partly clear	1 some	1 some aspects fine	
2 fair	2 fair	2 fair	2 not well fitting	2 some own input	2 average	2 average	2 many	2 good	
3 good	3 good	3 well performed, sufficient number	3 deviations qualitatively analysed	3 + some interesting results	3 some aspects above average	3 some parts well done	3 + data/theory convincingly supported	3 some aspects efficient	
4 detailed demonstrative	4 quite detailed, correct	4 + results explained errors analysed	4 + theory limits explained, conclusive	4 considerable experimental or theoretical	4 interesting solution	4 overall clear, demonstrative	4 proved deep understanding	4 overall efficient	
5 deep and comprehensible, shows physical insight	5 detailed, complex, completely testable	5 + reproducible, convincing analysis	5 well fitting, deviations analysed, conclusive	5 considerable experimental and theoretical	5 greater extent than expected	5 + complex concepts well communicated			

NOTES:

flow rate changed ✓
different cond'n
not different masses!

Error analysis?
S1, S2?

OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 1.5 - 0 = 7$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant	0 almost nothing	0 no or irrelevant	0 too few	0 no	0 poor	0 almost no	0 too few	0 poor	0 poor	0 no	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 relevant, aimed at resolving unclear points in the report	1 some main points	1 few	1 some	1 some	1 reasonable	1 few	1 some	1 some correct	1 good	1 some	
2 + short, apt and clear, well prioritized, all time used	2 main points	2 some	2 some correct	2 reasonable	2 fair	2 some	2 some correct	2 good	2 some aspects efficient	2 fair	
	3 all relevant points	3 many	3 many correct	3 fair	3 efficient	3 good	3 many correct	3 some aspects efficient	3 overall efficient	3 very good	
	4 practically all points	4 practically all	4 + improvement suggestions	4 very good	4 + all time used	4 new crucial point(s)	4 + improvement suggestions	4 overall efficient	4 overall efficient	4 very good	

NOTES: precise
region
measured technique

like the way of discussion
a little bit more own input and less
Q&A would be nice

REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 1.5 + 0 + 0.5 + 0.5 - 0 = 5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS					
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions							
0	too few, mostly irrelevant	0	poor/wrong	irrelevant	no	0	poor/wrong	irrelevant	no	0	almost no	too few	-1	irrelevant	0	concise and correct or no questions asked
1	+ suitably allotted to Rep & Opp, most time used	1	partial	partially relevant	some	1	too short/long	partially relevant	some	1	too short/long	some	0	none	-1	some incorrect, inconclusive or too long
2	+ short, apt and clear, well prioritized, time managed efficiently	2	good	mostly adequate	reasonable	2	informative, apt	mostly adequate	reasonable	1	relevant parts	many	1	relevant, constructive	-2	deeply incorrect or show deep misconceptions
		3	detailed, complex	fully adequate	good	3	condensed & accurate	fully adequate	good	2	accurate, conclusive	fully adequate				

NOTES: effect relevance
set up observation (unresolvable)
no error estimation
scally?

REPORTER

Start from 1 and add/subtract

$$1 + 3.5 + 1.5 - 0.5 = 6$$



SCORESHEET

Stage: 2 Fight 2 A, Problem: 14

signature

Thomas Lindner

Lindner, Thomas

BRG APP Innsbruck:

BG/BRG Villach 1:

Hungary:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	0 almost no	0 too few	0 no/ almost no	0 others' data, incorrectly cited	0 misunderstood	0 unclear, chaotic	0 too few	0 poor	0 concise and correct or no questions asked
1 some	1 some	1 some	1 some	1 review of sources, cited	1 partly	1 partly clear	1 some	1 some aspects fine	1 some incorrect, inconclusive or too long
2 fair	2 fair	2 <input checked="" type="checkbox"/> fair	2 not well fitting	2 some own input	2 <input checked="" type="checkbox"/> average	2 average	2 many	2 good	2 deeply incorrect or show deep misconceptions
3 <input checked="" type="checkbox"/> good	3 <input checked="" type="checkbox"/> good	3 well performed, sufficient number	3 <input checked="" type="checkbox"/> deviations qualitatively analysed	3 <input checked="" type="checkbox"/> some interesting results	3 some aspects above average	3 <input checked="" type="checkbox"/> some parts well done	3 <input checked="" type="checkbox"/> + data/theory convincingly supported	3 <input checked="" type="checkbox"/> some aspects efficient	
4 detailed demonstrative	4 quite detailed, correct	4 + results explained errors analysed	4 + theory limits explained, conclusive	4 considerable experimental or theoretical	4 interesting solution	4 overall clear, demonstrative			
5 deep and comprehensible, shows physical insight	5 detailed, complex, completely testable	5 + reproducible, convincing analysis	5 well fitting, deviations analysed, conclusive	5 considerable experimental and theoretical	5 greater extent than expected	5 + complex concepts well communicated	5 proved deep understanding	5 overall efficient	

NOTES:

Friction is important to explain why it stops ; if you do error bars do it consistently

OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 3.5 + 3 - 0 = 8$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant	0 <input checked="" type="checkbox"/> relevant, aimed at resolving unclear points in the report	0 almost nothing	0 no or irrelevant	0 too few	0 no	0 poor	0 almost no	0 too few	0 poor	0 no	0 concise and correct or no questions asked
1	1 + short, apt and clear, well prioritized, all time used	1 some main points	1 few	1 some	1 some	1 reasonable	1 few	1 some	1 some aspects fine	1 some	1 some incorrect, inconclusive or too long
2		2 <input checked="" type="checkbox"/> main points	2 some	2 some correct	2 reasonable	2 fair	2 some	2 <input checked="" type="checkbox"/> some correct	2 good	2 reasonable	2 deeply incorrect or show deep misconceptions
3		3 all relevant points	3 <input checked="" type="checkbox"/> many	3 <input checked="" type="checkbox"/> many correct	3 <input checked="" type="checkbox"/> fair	3 <input checked="" type="checkbox"/> efficient	3 <input checked="" type="checkbox"/> good	3 many correct	3 some aspects efficient	3 <input checked="" type="checkbox"/> fair	
4		4 practically all points	4 practically all	4 + improvement suggestions	4 <input checked="" type="checkbox"/> very good	4 + all time used	4 new crucial point(s)	4 + improvement suggestions	4 <input checked="" type="checkbox"/> overall efficient	4 very good	

NOTES:

(should) have brought in friction → well done!

REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 2 + 2 + 1 - 0.5 - 0 = 8$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant	0 relevant, meant to clarify unclear points	0 poor/wrong	0 irrelevant	0 no	0 poor/wrong	0 irrelevant	0 no	0 almost no	0 too few	0 irrelevant	0 concise and correct or no questions asked
1 + suitably allotted to Rep & Opp, most time used	1 <input checked="" type="checkbox"/> + short, apt and clear, well prioritized, time managed efficiently	1 partial	1 partially relevant	1 some	1 too short/long	1 partially relevant	1 some	1 too short/long	1 some	1 none	1 some incorrect, inconclusive or too long
2		2 <input checked="" type="checkbox"/> good	2 mostly adequate	2 <input checked="" type="checkbox"/> reasonable	2 <input checked="" type="checkbox"/> informative, apt	2 mostly adequate	2 <input checked="" type="checkbox"/> reasonable	2 <input checked="" type="checkbox"/> relevant parts	2 many	2 <input checked="" type="checkbox"/> relevant, constructive	2 deeply incorrect or show deep misconceptions
3		3 detailed, complex	3 <input checked="" type="checkbox"/> fully adequate	3 good	3 condensed & accurate	3 fully adequate	3 good	3 <input checked="" type="checkbox"/> accurate, conclusive	3 <input checked="" type="checkbox"/> fully adequate		

NOTES:

well pointed out missed friction

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 2 Fight 2 A, Problem: 14

sign

Grillenbeck

Grillenbeck, Thomas

BRG APP Innsbruck: Ondrej Rihl BG/BRG Villach 1: Miro Joensuu Hungary: Artur Balazs

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	+ data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 ☒ concise and correct or no questions asked
- 1 ☐ some incorrect, inconclusive or too long
- 2 ☐ deeply incorrect or show deep misconceptions

NOTES:

OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 3 - 0 = 7$$

QUESTIONS ASKED

- 0 ☐ too few, mostly irrelevant
- 1 ☒ relevant, aimed at resolving unclear points in the report
- 2 ☐ + short, apt and clear, well prioritized, all time used

OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	main points	some	some correct	reasonable	fair
3	all relevant points	many	many correct	fair	efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	some	some correct	good	reasonable
3	good	many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 ☒ concise and correct or no questions asked
- 1 ☐ some incorrect, inconclusive or too long
- 2 ☐ deeply incorrect or show deep misconceptions

NOTES:

no slides

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 + 1 - 0 - 0 = 7$$

QUESTIONS ASKED

- 0 ☐ too few, mostly irrelevant
- 1 ☒ relevant, meant to clarify unclear points
- 2 ☐ + suitably allotted to Rep & Opp, most time used
- 3 ☐ + short, apt and clear, well prioritized, time managed efficiently

REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	partial	partially relevant	some
2	good	mostly adequate	reasonable
3	detailed, complex	fully adequate	good

REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	some
2	informative, apt	mostly adequate	reasonable
3	condensed & accurate	fully adequate	good

DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	almost no	too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

MISSED POINTS POINTED OUT

- 1 ☐ irrelevant
- 0 ☒ none
- 1 ☐ relevant, constructive

ANSWERS TO JURY QUESTIONS

- 0 ☒ concise and correct or no questions asked
- 1 ☐ some incorrect, inconclusive or too long
- 2 ☐ deeply incorrect or show deep misconceptions

NOTES:

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 2 Fight 2 A, Problem:

sign

Kundracik

Kundracik, Frantisek

BRG APP Innsbruck:

BG/BRG Villach 1:

Hungary:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- unclear, chaotic	0 --- too few	0 --- poor	0 --- concise and correct or no questions asked -1 --- some incorrect, inconclusive or too long -2 --- deeply incorrect or show deep misconceptions
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- partly clear	1 --- some	1 --- some aspects fine	
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- average	2 --- many	2 --- good	
3 --- good	3 --- good	3 --- well performed, sufficient number	3 --- deviations qualitatively analysed	3 --- + some interesting results	3 --- some aspects above average	3 --- some parts well done	3 --- + data/theory convincingly supported	3 --- some aspects efficient	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained errors analysed	4 --- + theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- interesting solution	4 --- overall clear, demonstrative	4 --- proved deep understanding	4 --- overall efficient	
5 --- deep and comprehensible, shows physical insight	5 --- detailed, complex, completely testable	5 --- + reproducible, convincing analysis	5 --- well fitting, deviations analysed, conclusive	5 --- considerable experimental and theoretical	5 --- greater extent than expected	5 --- + complex concepts well communicated			

NOTES:

- : Friction force is crucial for stopping the fall - wasn't included
 + : good descriptions of initial phase of the movement.

OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2.5 + 3 - 0 = 8$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 --- too few, mostly irrelevant	0 --- almost nothing	0 --- no or irrelevant	0 --- too few	0 --- no	0 --- poor	0 --- poor	0 --- almost no	0 --- too few	0 --- poor	0 --- no	0 --- concise and correct or no questions asked -1 --- some incorrect, inconclusive or too long -2 --- deeply incorrect or show deep misconceptions
1 --- relevant, aimed at resolving unclear points in the report	1 --- some main points	1 --- few	1 --- some	1 --- some	1 --- reasonable	1 --- reasonable	1 --- few	1 --- some	1 --- some aspects fine	1 --- some	
2 --- + short, apt and clear, well prioritized, all time used	2 --- main points	2 --- some	2 --- some correct	2 --- reasonable	2 --- fair	2 --- fair	2 --- some	2 --- some correct	2 --- good	2 --- reasonable	
	3 --- all relevant points	3 --- many	3 --- many correct	3 --- fair	3 --- efficient	3 --- efficient	3 --- good	3 --- many correct	3 --- some aspects efficient	3 --- fair	
	4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- + all time used	4 --- + all time used	4 --- new crucial point(s)	4 --- + improvement suggestions	4 --- overall efficient	4 --- very good	

NOTES:

+ : good points, clear statements.

REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 1.5 + 1.5 + 1.5 - 0 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS		
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions				
0	too few, mostly irrelevant	0	poor/wrong	irrelevant	0	poor/wrong	irrelevant	0	almost no	-1	irrelevant	0	concise and correct or no questions asked
	relevant, meant to clarify unclear points	1	partial	partially relevant	1	too short/long	partially relevant	1	too short/long	0	none		some incorrect, inconclusive or too long
1	+ suitably allotted to Rep & Opp, most time used	2	good	mostly adequate	2	informative, apt	mostly adequate	2	relevant parts	1	relevant, constructive	-1	deeply incorrect or show deep misconceptions
2	+ short, apt and clear, well prioritized, time managed efficiently	3	detailed, complex	fully adequate	3	condensed & accurate	fully adequate	3	accurate, conclusive	2		-2	

NOTES:

REPORTER

Start from 1 and add/subtract

$$1 + 4 + 1 - 0 = 6$$



SCORESHEET

Stage: 2 Fight 2 A, Problem:

BRG APP Innsbruck: 2.2.2

BG/BRG Villach 1:

sign

Mathelitsch, Leopold

Hungary:

Belo, 2

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 — almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 — too few	poor	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — some	some	some	some	review of sources, cited	partly average	partly clear	1 — some	some aspects fine	
2 — fair	fair	fair	not well fitting	some own input	average	average	2 — many	good	
3 — good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	3 — + data/theory convincingly supported	some aspects efficient	
4 — detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	4 — proved deep understanding	overall efficient	
5 — deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

pool key were right (but) friction is relevant, should be included in 1. one side

OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 3 + 3 - 0 = 8$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 — too few, mostly irrelevant		0 — almost nothing	no or irrelevant	too few	no	poor	0 — almost no	too few	poor	no	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — relevant, aimed at resolving unclear points in the report		1 — some main points	few	some	some	reasonable	1 — few	some	some aspects fine	some	
2 — + short, apt and clear, well prioritized, all time used		2 — main points	some	some correct	reasonable	fair	2 — some	some correct	good	reasonable	
		3 — all relevant points	many	many correct	fair	efficient	3 — good	many correct	some aspects efficient	fair	
		4 — practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 — new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

(+) pointed out friction as very important

REVIEWER

Start from 1 and add/subtract

$$1 + 2 + 1 + 1 + 1 - 0 = 6$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 — too few, mostly irrelevant		0 — poor/wrong	irrelevant	no	0 — poor/wrong	irrelevant	no	0 — almost no	too few	-1 — irrelevant	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — relevant, meant to clarify unclear points		1 — partial	partially relevant	some	1 — too short/long	partially relevant	some	1 — too short/long	some	0 — none	
2 — + suitably allotted to Rep & Opp, most time used		2 — good	mostly adequate	reasonable	2 — informative, apt	mostly adequate	reasonable	2 — relevant parts	many	1 — relevant, constructive	
3 — + short, apt and clear, well prioritized, time managed efficiently		3 — detailed, complex	fully adequate	good	3 — condensed & accurate	fully adequate	good	3 — accurate, conclusive	fully adequate		

NOTES:

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 2 Fight 2 A, Problem: 14

sign *Lisa Weiß*

Weiß, Lisa

BRG APP Innsbruck: *Report*

BG/BRG Villach 1:

Hungary:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- unclear, chaotic	0 --- too few	0 --- poor	0 --- concise and correct or no questions asked
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- partly clear	1 --- some	1 --- some aspects fine	1 --- some incorrect, inconclusive or too long
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- average	2 --- many	2 --- good	2 --- deeply incorrect or show deep misconceptions
3 --- good	3 --- good	3 --- well performed, sufficient number	3 --- deviations qualitatively analysed	3 --- + some interesting results	3 --- some aspects above average	3 --- some parts well done	3 --- + data/theory convincingly supported	3 --- some aspects efficient	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained, errors analysed	4 --- + theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- interesting solution	4 --- overall clear, demonstrative			
5 --- deep and comprehensible, shows physical insight	5 --- detailed, complex, completely testable	5 --- + reproducible, convincing analysis	5 --- well fitting, deviations analysed, conclusive	5 --- considerable experimental and theoretical	5 --- greater extent than expected	5 --- + complex concepts well communicated			

NOTES:

OPPONENT

Start from 1 and add/subtract

$$1 + 0,5 + 2 + 2 - 0 = 6$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 --- too few, mostly irrelevant	0 --- relevant, aimed at resolving unclear points in the report	0 --- almost nothing	0 --- no or irrelevant	0 --- too few	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- poor	0 --- no	0 --- concise and correct or no questions asked
1 --- + short, apt and clear, well prioritized, all time used		1 --- some main points	1 --- few	1 --- some	1 --- some	1 --- reasonable	1 --- few	1 --- some	1 --- some aspects fine	1 --- some	1 --- some incorrect, inconclusive or too long
		2 --- main points	2 --- some	2 --- some correct	2 --- reasonable	2 --- fair	2 --- some	2 --- some correct	2 --- good	2 --- reasonable	2 --- deeply incorrect or show deep misconceptions
		3 --- all relevant points	3 --- many	3 --- many correct	3 --- fair	3 --- efficient	3 --- good	3 --- many correct	3 --- some aspects efficient	3 --- fair	
		4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- + all time used	4 --- new crucial point(s)	4 --- + improvement suggestions	4 --- overall efficient	4 --- very good	

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 2 + 1,25 + 1,25 + 1,25 + 0 - 0,5 = 6$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 --- too few, mostly irrelevant	0 --- relevant, meant to clarify unclear points	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- almost no	0 --- too few	-1 --- irrelevant	0 --- concise and correct or no questions asked
1 --- + suitably allotted to Rep & Opp, most time used		1 --- partial	1 --- partially relevant	1 --- some	1 --- too short/long	1 --- partially relevant	1 --- some	1 --- too short/long	1 --- some	0 --- none	1 --- some incorrect, inconclusive or too long
2 --- short, apt and clear, well prioritized, time managed efficiently		2 --- good	2 --- mostly adequate	2 --- reasonable	2 --- informative, apt	2 --- mostly adequate	2 --- reasonable	2 --- relevant parts	2 --- many	1 --- relevant, constructive	2 --- deeply incorrect or show deep misconceptions
		3 --- detailed, complex	3 --- fully adequate	3 --- good	3 --- condensed & accurate	3 --- fully adequate	3 --- good	3 --- accurate, conclusive	3 --- fully adequate		

NOTES:

depending on elasticity
change "spring-like"
behaviour

IBT - March 2019

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 2 Fight 2 A, Problem: 14

Signature

Zajki-Zechmeister, Krisztina

BRG APP Innsbruck:

BG/BRG Villach 1:

Hungary: Ádám B.

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 too few	poor	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 some	some	some	some	review of sources, cited	partly	partly clear	1 some	some aspects fine	
2 fair	fair	fair	not well fitting	some own input	average	average	2 many	good	
3 good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	3 + data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	4 proved deep understanding	overall efficient	
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

very easy to follow theory
 carrying money? How would the trajectory of light weight change?
 what is stopping angle → cleared

effect is not the same!

OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 2 + 2 - 0 = 7$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant	0	almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 relevant, aimed at resolving unclear points in the report	1	some main points	few	some	some	reasonable	1 few	some	some aspects fine	some	
2 + short, apt and clear, well prioritized, all time used	2	main points	some	some correct	reasonable	fair	2 some	some correct	good	reasonable	
	3	all relevant points	many	many correct	fair	efficient	3 good	many correct	some aspects efficient	fair	
	4	practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

error analysis

very chronologically
 more graphs? friction not too relevant

frame rate / camera → not so relevant
 friction too
 how often measured

REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 1 + 2 + 1 - 0 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant	0	poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 relevant, meant to clarify unclear points	1	partial	partially relevant	some	1 too short/long	partially relevant	some	1 too short/long	some	0 none	
2 + suitably allotted to Rep & Opp, most time used	2	good	mostly adequate	reasonable	2 informative, apt	mostly adequate	reasonable	2 relevant parts	many	1 relevant, constructive	
3 + short, apt and clear, well prioritized, time managed efficiently	3	detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate		

NOTES:

why friction so important?

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 3 Fight 2 A, Problem: 5

BG/BRG Villach 1:

Hungary:

Russia:

Lindner, Thomas

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3				deviations	+ some interesting results	some aspects above average	some parts well done
4	X good	good	X sufficient number	qualitatively analysed		X interesting solution	X overall clear, demonstrative
5	detailed demonstrative	X quite detailed, correct	+ results explained errors analysed	X + theory limits explained, conclusive	X considerable experimental or theoretical		
6	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	X + data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
- 1 — some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES:

good to compare to conflicting theories, error analysis is often about error propagation

OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2.5 + 2.5 - 0.5 = 7$$

QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- 1 X relevant, aimed at resolving unclear points in the report
- 2 — + short, apt and clear, well prioritized, all time used

OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	X main points	X some	X some correct	reasonable	fair
3	all relevant points	many	many correct	X fair	X efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	X some	some correct	good	X reasonable
3	good	X many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
- 1 X some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES:

good point on several resonators, good to raise mismatch theory-experiment

REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 1.5 + 1 + 0.5 - 0.5 - 0 = 5$$

QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- relevant, meant to clarify unclear points
- 1 X + suitably allotted to Rep & Opp, most time used
- 2 — + short, apt and clear, well prioritized, time managed efficiently

REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	X partial	partially relevant	some
2	good	X mostly adequate	X reasonable
3	detailed, complex	fully adequate	good

REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	X some
2	X informative, apt	X mostly adequate	X reasonable
3	condensed & accurate	fully adequate	good

DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	X almost no	X too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

MISSED POINTS POINTED OUT

- 0 X none
- 1 — relevant, constructive

ANSWERS TO JURY QUESTIONS

- 0 — concise and correct or no questions asked
- 1 — some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES: state your opinion about the physics!

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 3 Fight 2 A, Problem: 5

sign *Grillenbeck*

Grillenbeck, Thomas

BG/BRG Villach 1: Rohan Walia Hungary: Level 1 Kovač Russia:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- unclear, chaotic	0 --- too few	0 --- poor	0 --- <input checked="" type="checkbox"/> concise and correct or no questions asked
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- partly clear <input checked="" type="checkbox"/>	1 --- some	1 --- some aspects fine	1 --- <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2 --- <input checked="" type="checkbox"/> fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average <input checked="" type="checkbox"/>	2 --- average	2 --- many <input checked="" type="checkbox"/>	2 --- <input checked="" type="checkbox"/> good	2 --- <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
3 --- good	3 --- <input checked="" type="checkbox"/> good	3 --- well performed/ sufficient number	3 --- deviations qualitatively analysed <input checked="" type="checkbox"/>	3 --- + some interesting results	3 --- some aspects above average	3 --- some parts well done <input checked="" type="checkbox"/>	3 --- + data/theory convincingly supported	3 --- some aspects efficient	3 --- <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained errors analysed	4 --- + theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- interesting solution	4 --- overall clear, demonstrative	4 --- proved deep understanding	4 --- overall efficient	
5 --- deep and comprehensible, shows physical insight	5 --- detailed, complex, completely testable	5 --- + reproducible, convincing analysis	5 --- well fitting, deviations analysed, conclusive	5 --- considerable experimental and theoretical	5 --- greater extent than expected	5 --- + complex concepts well communicated			

NOTES:

OPPONENT

Start from 1 and add/subtract

$$1 + 4 + 3 + 2 - 0 = 6$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 --- too few, mostly irrelevant	0 --- relevant, aimed at resolving unclear points in the report	0 --- almost nothing	0 --- no or irrelevant	0 --- too few	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- poor	0 --- no	0 --- <input checked="" type="checkbox"/> concise and correct or no questions asked
1 --- <input checked="" type="checkbox"/>	1 --- + short, apt and clear, well prioritized, all time used	1 --- some main points	1 --- few	1 --- some	1 --- some	1 --- reasonable	1 --- few	1 --- some	1 --- some aspects fine	1 --- some	1 --- <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2 --- <input checked="" type="checkbox"/>		2 --- main points	2 --- some	2 --- some correct	2 --- reasonable	2 --- fair	2 --- some	2 --- some correct	2 --- good	2 --- reasonable <input checked="" type="checkbox"/>	2 --- <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
3 --- <input checked="" type="checkbox"/>		3 --- all relevant points	3 --- many	3 --- many correct	3 --- fair	3 --- efficient <input checked="" type="checkbox"/>	3 --- good <input checked="" type="checkbox"/>	3 --- many correct	3 --- some aspects efficient	3 --- fair	
4 --- <input checked="" type="checkbox"/>		4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- + all time used	4 --- new crucial point(s)	4 --- + improvement suggestions	4 --- overall efficient	4 --- very good	

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 1 + 1 + 0 - 0 = 6$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 --- too few, mostly irrelevant	0 --- relevant, meant to clarify unclear points	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- almost no	0 --- too few	-1 --- irrelevant	0 --- <input checked="" type="checkbox"/> concise and correct or no questions asked
1 --- <input checked="" type="checkbox"/>	1 --- + suitably allotted to Rep & Opp, most time used	1 --- partial <input checked="" type="checkbox"/>	1 --- partially relevant	1 --- some <input checked="" type="checkbox"/>	1 --- too short/long	1 --- partially relevant	1 --- some <input checked="" type="checkbox"/>	1 --- too short/long	1 --- some <input checked="" type="checkbox"/>	0 --- <input checked="" type="checkbox"/> none	1 --- <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2 --- <input checked="" type="checkbox"/>	2 --- + short, apt and clear, well prioritized, time managed efficiently	2 --- good	2 --- mostly adequate <input checked="" type="checkbox"/>	2 --- reasonable	2 --- informative, apt	2 --- mostly adequate <input checked="" type="checkbox"/>	2 --- reasonable	2 --- relevant parts	2 --- many	1 --- relevant, constructive	2 --- <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
3 --- <input checked="" type="checkbox"/>		3 --- detailed, complex	3 --- fully adequate	3 --- good	3 --- condensed & accurate	3 --- fully adequate	3 --- good	3 --- accurate, conclusive	3 --- fully adequate		

NOTES:

no slides

REPORTER

Start from 1 and add/subtract

$$1 + 4 + 1 - 0 = 6$$



SCORESHEET

Stage: 3 Fight 2 A, Problem:

BG/BRG Villach 1:

sign

[Signature]

Kundracik, Frantisek

Hungary:

Russia:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 — almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 — too few	poor	0 — concise and correct or no questions asked
1 — some	some	some	some	review of sources, cited	partly	partly clear	1 — some	some aspects fine	
2 — fair	fair	fair	not well fitting	some own input	average	average	2 — many	good	-1 — some incorrect, inconclusive or too long
3 — good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	3 — + data/theory convincingly supported	some aspects efficient	-2 — deeply incorrect or show deep misconceptions
4 — detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative			
5 — deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES: + many experiments (regular, ...) - measured frequencies lower than theories without explanation

OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 - 0 = 6$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 — too few, mostly irrelevant		almost nothing	no or irrelevant	too few	no	poor	0 — almost no	too few	poor	no	0 — concise and correct or no questions asked
1 — relevant, aimed at resolving unclear points in the report		some main points	few	some	some	reasonable	1 — few	some	some aspects fine	some	
2 — + short, apt and clear, well prioritized, all time used		main points	some	some correct	reasonable	fair	2 — some	some correct	good	reasonable	-1 — some incorrect, inconclusive or too long
		all relevant points	many	many correct	fair	efficient	3 — good	many correct	some aspects efficient	fair	-2 — deeply incorrect or show deep misconceptions
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 — new crucial point(s)	+ improvement suggestions	overall efficient	very good	

+ good forecasts - no reaction to the answers (in many cases)

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 + 0.5 - 0 - 0 = 5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 — too few, mostly irrelevant		poor/wrong	irrelevant	no	0 — poor/wrong	irrelevant	no	0 — almost no	too few	-1 — irrelevant	0 — concise and correct or no questions asked
1 — relevant, meant to clarify unclear points		partial	partially relevant	some	1 — too short/long	partially relevant	some	1 — too short/long	some	0 — none	
2 — + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	2 — informative, apt	mostly adequate	reasonable	2 — relevant parts	many	1 — relevant, constructive	-1 — some incorrect, inconclusive or too long
3 — + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	3 — condensed & accurate	fully adequate	good	3 — accurate, conclusive	fully adequate		-2 — deeply incorrect or show deep misconceptions

NOTES:

only 1 point discussed! (bubbles)

2 points
1. bubbles
2. discussion was good

REPORTER

Start from 1 and add/subtract



$$1 + 1 + 2 - 1 = 3$$

SCORESHEET

Stage: 3 Fight 2 A, Problem:

BG/BRG Villach 1: Robert Golie Hungary: Kovacs

sign

Mathelitsch, Leopold

Russia:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 — almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 — too few	poor	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — some	some	some	some	review of sources, cited	partly	partly clear	1 — some	some aspects fine	
2 — fair	fair	fair	not well fitting	some own input	average	average	2 — many	good	
3 — good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	3 — + data/theory convincingly supported	some aspects efficient	
4 — detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	4 — proved deep understanding	overall efficient	
5 — deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

error: $f_1 = 3f_2$ (not 2f) missing air bubbles

OPPONENT

Start from 1 and add/subtract

$$1 + 2 + 3 + 2 - 1 = 7$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 — too few, mostly irrelevant		0 — almost nothing	no or irrelevant	too few	no	poor	0 — almost no	too few	poor	no	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — relevant, aimed at resolving unclear points in the report		1 — some main points	few	some	some	reasonable	1 — few	some	some aspects fine	some	
2 — + short, apt and clear, well prioritized, all time used		2 — main points	some	some correct	reasonable	fair	2 — some	some correct	good	reasonable	
		3 — all relevant points	many	many correct	fair	efficient	3 — good	many correct	some aspects efficient	fair	
		4 — practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 — new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1 + 1 + 1 + 1 - 1 = 5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 — too few, mostly irrelevant		0 — poor/wrong	irrelevant	no	0 — poor/wrong	irrelevant	no	0 — almost no	too few	-1 — irrelevant	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — relevant, meant to clarify unclear points		1 — partial	partially relevant	some	1 — too short/long	partially relevant	some	1 — too short/long	some	0 — none	
2 — + suitably allotted to Rep & Opp, most time used		2 — good	mostly adequate	reasonable	2 — informative, apt	mostly adequate	reasonable	2 — relevant parts	many	1 — relevant, constructive	
3 — + short, apt and clear, well prioritized, time managed efficiently		3 — detailed, complex	fully adequate	good	3 — condensed & accurate	fully adequate	good	3 — accurate, conclusive	fully adequate		

NOTES:

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 3 Fight 2 A, Problem: 5

signature Lisa Weiß

Weiß, Lisa

BG/BRG Villach 1: Rohan Walia Hungary: Levente Kozak Russia:

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	+ data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 --- concise and correct or no questions asked
 1 --- some incorrect, inconclusive or too long
 2 --- deeply incorrect or show deep misconceptions

NOTES:

price that no error have been presented
 offset not explained
 variation of many parameters

OPPONENT

Start from 1 and add/subtract

$$1 + 0,5 + 1,5 + 2 - 1,5 = 4$$

QUESTIONS ASKED

- 0 --- too few, mostly irrelevant
 1 --- relevant, aimed at resolving unclear points in the report
 2 --- + short, apt and clear, well prioritized, all time used

OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	main points	some	some correct	reasonable	fair
3	all relevant points	many	many correct	fair	efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	some	some correct	good	reasonable
3	good	many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 --- concise and correct or no questions asked
 1 --- some incorrect, inconclusive or too long
 2 --- deeply incorrect or show deep misconceptions

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 1,5 + 1 + 1 + 0,5 - 1 = 5$$

QUESTIONS ASKED

- 0 --- too few, mostly irrelevant
 1 --- relevant, meant to clarify unclear points
 2 --- + suitably allotted to Rep & Opp, most time used
 3 --- + short, apt and clear, well prioritized, time managed efficiently

REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	partial	partially relevant	some
2	good	mostly adequate	reasonable
3	detailed, complex	fully adequate	good

REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	some
2	informative, apt	mostly adequate	reasonable
3	condensed & accurate	fully adequate	good

DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	almost no	too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

MISSED POINTS POINTED OUT

- 1 --- irrelevant
 0 --- none
 1 --- relevant, constructive

ANSWERS TO JURY QUESTIONS

- 0 --- concise and correct or no questions asked
 1 --- some incorrect, inconclusive or too long
 2 --- deeply incorrect or show deep misconceptions

NOTES:

REPORTER

Start from 1 and add/subtract

$$1 + 5 + 1,5 - 0 = 8$$



SCORESHEET

Stage: 3 Fight 2 A, Problem: 5

BG/BRG Villach 1: R. Vekic

Hungary: L. Kovacs

Russia:

Zajki-Zechmeister, Krisztina

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS	
	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses		reporter's conduct at the discussion
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	too few	poor	0 ——— concise and correct or no questions asked
1	some	some	some	some	review of sources, cited	partly	partly clear	some	some aspects fine	
2	fair	fair	fair	not well fitting	some own input	average	average	many	good	-1 ——— some incorrect, inconclusive or too long
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	+ data/theory convincingly supported	some aspects efficient	
4	detailed	quite detailed, correct	+ results explained	+ theory limits	considerable experimental or theoretical	interesting solution	overall clear, demonstrative			-2 ——— deeply incorrect or show deep misconceptions
5	demonstrative	detailed, complex, completely testable	errors analysed	explained, conclusive	considerable experimental	greater extent than expected	+ complex concepts well communicated	proved deep understanding	overall efficient	
6	deep and comprehensible, shows physical insight		+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical					
7										

NOTES:

+ like the comparison of 2 theories Q: Eval correction factor -> where from?

OPPONENT

Start from 1 and add/subtract

$$1 + 0,5 + 3 + 2 - 0 = 7$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0	too few, mostly irrelevant	almost nothing	no or irrelevant	too few	no	poor	almost no	too few	poor	no	0 --- concise and correct or no questions asked
1	relevant, aimed at resolving unclear points in the report	some main points	few	some	some	reasonable	few	some	some aspects fine	some	1 --- some incorrect, inconclusive or too long
2	+ short, apt and clear, well prioritized, all time used	main points	some	some correct	reasonable	fair	some	some correct	good	reasonable	2 --- deeply incorrect or show deep misconceptions
3		all relevant points	many	many correct	fair	efficient	good	many correct	some aspects efficient	fair	
4		practically all points	practically all	+ improvement suggestions	very good	+ all time used	new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

bubbles not sooo relevant?

viscosity not so relevant (water is stated in problem)

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1,5 + 1,5 + 1,5 + 0,5 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0	too few, mostly irrelevant	poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	almost no	too few	-1 --- irrelevant	0 --- concise and correct or no questions asked
1	relevant, meant to clarify unclear points	partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	0 --- none	1 --- some incorrect, inconclusive or too long
2	+ suitably allotted to Rep & Opp, most time used	good	mostly adequate	reasonable	informative, apt	mostly adequate	reasonable	relevant parts	many	1 --- relevant, constructive	2 --- deeply incorrect or show deep misconceptions
3	+ short, apt and clear, well prioritized, time managed efficiently	detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate		

NOTES:

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 4 Fight 2 A, Problem: 13

Signature: Thomas Lindner

Lindner, Thomas

Hungary:

Russia:

BRG APP Innsbruck:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 too few	poor	0 <input checked="" type="checkbox"/> concise and correct or no questions asked 1 <input checked="" type="checkbox"/> some incorrect, inconclusive or too long 2 <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
1 some	some	some	some	review of sources, cited	partly	partly clear	1 <input checked="" type="checkbox"/> some	some aspects fine	
2 fair	<input checked="" type="checkbox"/> fair	fair	<input checked="" type="checkbox"/> not well fitting	some own input	average	average	2 <input checked="" type="checkbox"/> many	good	
3 <input checked="" type="checkbox"/> good	good	<input checked="" type="checkbox"/> well performed, sufficient number	<input checked="" type="checkbox"/> deviations qualitatively analysed	<input checked="" type="checkbox"/> + some interesting results	<input checked="" type="checkbox"/> some aspects above average	<input checked="" type="checkbox"/> some parts well done	3 <input checked="" type="checkbox"/> + data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	4 <input checked="" type="checkbox"/> proved deep understanding	overall efficient	
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

Theoretical prediction of shapes (e.g. for denium) would be insightful, good answer to reviewer

OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 2 + 1 - 0 = 5$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 <input checked="" type="checkbox"/> too few, mostly irrelevant		0 almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 <input checked="" type="checkbox"/> concise and correct or no questions asked 1 <input checked="" type="checkbox"/> some incorrect, inconclusive or too long 2 <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
1 <input checked="" type="checkbox"/> relevant, aimed at resolving unclear points in the report		1 <input checked="" type="checkbox"/> some main points	few	<input checked="" type="checkbox"/> some	<input checked="" type="checkbox"/> some	<input checked="" type="checkbox"/> reasonable	1 <input checked="" type="checkbox"/> few	<input checked="" type="checkbox"/> some	<input checked="" type="checkbox"/> some aspects fine	<input checked="" type="checkbox"/> some	
2 <input checked="" type="checkbox"/> + short, apt and clear, well prioritized, all time used		2 <input checked="" type="checkbox"/> main points	some	some correct	reasonable	fair	2 <input checked="" type="checkbox"/> some	some correct	good	reasonable	
		3 <input checked="" type="checkbox"/> all relevant points	<input checked="" type="checkbox"/> many	many correct	fair	efficient	3 <input checked="" type="checkbox"/> good	many correct	some aspects efficient	fair	
		4 <input checked="" type="checkbox"/> practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 <input checked="" type="checkbox"/> new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

questions were not very helpful for clarification

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 1.5 + 1 + 0.5 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 <input checked="" type="checkbox"/> too few, mostly irrelevant		0 poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 <input checked="" type="checkbox"/> concise and correct or no questions asked 1 <input checked="" type="checkbox"/> some incorrect, inconclusive or too long 2 <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
1 <input checked="" type="checkbox"/> relevant, meant to clarify unclear points		1 partial	partially relevant	some	1 <input checked="" type="checkbox"/> too short/long	partially relevant	some	1 <input checked="" type="checkbox"/> too short/long	some	0 none	
2 <input checked="" type="checkbox"/> + suitably allotted to Rep & Opp, most time used		2 <input checked="" type="checkbox"/> good	<input checked="" type="checkbox"/> mostly adequate	<input checked="" type="checkbox"/> reasonable	2 <input checked="" type="checkbox"/> informative, apt	<input checked="" type="checkbox"/> mostly adequate	<input checked="" type="checkbox"/> reasonable	2 <input checked="" type="checkbox"/> relevant parts	<input checked="" type="checkbox"/> many	1 <input checked="" type="checkbox"/> relevant, constructive	
3 <input checked="" type="checkbox"/> + short, apt and clear, well prioritized, time managed efficiently		3 detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate		

NOTES:

point out that there needs to be a discussion of accuracy

REPORTER

Start from 1 and add/subtract



$$1 + 5 + 2 - 0 = 8$$

SCORESHEET

Stage: 4 Fight 2 A, Problem: 13

Hungary: Marcell Csécsi

sign

Grillenbeck

Grillenbeck, Thomas

Russia: Wikita Trubicyu BRG APP Innsbruck:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- unclear, chaotic	0 --- too few	0 --- poor	0 --- <input checked="" type="checkbox"/> concise and correct or no questions asked
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- partly clear	1 --- some	1 --- some aspects fine	
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- average	2 --- many	2 --- good	1 --- some incorrect, inconclusive or too long
3 --- good <input checked="" type="checkbox"/>	3 --- good	3 --- well performed, sufficient number	3 --- deviations qualitatively analysed	3 --- + some interesting results	3 --- some aspects above average	3 --- some parts well done	3 --- + data/theory convincingly supported	3 --- some aspects efficient	2 --- deeply incorrect or show deep misconceptions
4 --- detailed demonstrative	4 --- quite detailed, correct <input checked="" type="checkbox"/>	4 --- + results explained, errors analysed <input checked="" type="checkbox"/>	4 --- + theory limits explained, conclusive <input checked="" type="checkbox"/>	4 --- considerable experimental or theoretical <input checked="" type="checkbox"/>	4 --- interesting solution	4 --- overall clear, demonstrative <input checked="" type="checkbox"/>			
5 --- deep and comprehensible, shows physical insight	5 --- detailed, complex, completely testable	5 --- + reproducible, convincing analysis	5 --- well fitting, deviations analysed, conclusive	5 --- considerable experimental and theoretical	5 --- greater extent than expected <input checked="" type="checkbox"/>	5 --- + complex concepts well communicated	5 --- proved deep understanding	5 --- overall efficient	

NOTES:

✓ no story

OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 1 - 0 = 5$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 --- too few, mostly irrelevant		0 --- almost nothing	0 --- no or irrelevant	0 --- too few	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- poor	0 --- no	0 --- <input checked="" type="checkbox"/> concise and correct or no questions asked
1 --- <input checked="" type="checkbox"/> relevant, aimed at resolving unclear points in the report		1 --- some main points	1 --- few	1 --- some	1 --- some	1 --- reasonable	1 --- few	1 --- some	1 --- some aspects fine	1 --- some	
2 --- + short, apt and clear, well prioritized, all time used		2 --- main points	2 --- some <input checked="" type="checkbox"/>	2 --- some correct <input checked="" type="checkbox"/>	2 --- reasonable <input checked="" type="checkbox"/>	2 --- fair <input checked="" type="checkbox"/>	2 --- some	2 --- some correct	2 --- good	2 --- reasonable	1 --- some incorrect, inconclusive or too long
		3 --- all relevant points	3 --- many	3 --- many correct	3 --- fair	3 --- efficient	3 --- good	3 --- many correct	3 --- some aspects efficient	3 --- fair	2 --- deeply incorrect or show deep misconceptions
		4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- + all time used	4 --- new crucial point(s)	4 --- + improvement suggestions	4 --- overall efficient	4 --- very good	

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 + 1 - 0 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 --- too few, mostly irrelevant		0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- almost no	0 --- too few	-1 --- irrelevant	0 --- <input checked="" type="checkbox"/> concise and correct or no questions asked
1 --- relevant, meant to clarify unclear points		1 --- partial	1 --- partially relevant	1 --- some	1 --- too short/long	1 --- partially relevant	1 --- some	1 --- too short/long	1 --- some	0 --- none	
1 --- <input checked="" type="checkbox"/> + suitably allotted to Rep & Opp, most time used		2 --- good <input checked="" type="checkbox"/>	2 --- mostly adequate <input checked="" type="checkbox"/>	2 --- reasonable <input checked="" type="checkbox"/>	2 --- informative, apt	2 --- mostly adequate <input checked="" type="checkbox"/>	2 --- reasonable	2 --- relevant parts	2 --- many	1 --- relevant, constructive	1 --- some incorrect, inconclusive or too long
2 --- + short, apt and clear, well prioritized, time managed efficiently		3 --- detailed, complex	3 --- fully adequate	3 --- good	3 --- condensed & accurate	3 --- fully adequate	3 --- good	3 --- accurate, conclusive	3 --- fully adequate	2 ---	2 --- deeply incorrect or show deep misconceptions

NOTES:

REPORTER

Start from 1 and add/subtract

$$1 + 5 + 2 - 0 = 8$$



SCORESHEET

Stage: 4 Fight 2 A, Problem: 13

Hungary:

Russia:

sign

Unlabeled

Kundracik, Frantisek

BRG APP Innsbruck:

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 --- almost no	0 --- almost no	0 --- too few	0 --- no/ almost no	0 --- others' data, incorrectly cited	0 --- misunderstood	0 --- unclear, chaotic	0 --- too few	0 --- poor	0 --- concise and correct or no questions asked -1 --- some incorrect, inconclusive or too long -2 --- deeply incorrect or show deep misconceptions
1 --- some	1 --- some	1 --- some	1 --- some	1 --- review of sources, cited	1 --- partly	1 --- partly clear	1 --- some	1 --- some aspects fine	
2 --- fair	2 --- fair	2 --- fair	2 --- not well fitting	2 --- some own input	2 --- average	2 --- average	2 --- many	2 --- good	
3 --- good	3 --- good	3 --- well performed, sufficient number	3 --- deviations qualitatively analysed	3 --- + some interesting results	3 --- some aspects above average	3 --- some parts well done	3 --- + data/theory convincingly supported	3 --- some aspects efficient	
4 --- detailed demonstrative	4 --- quite detailed, correct	4 --- + results explained errors analysed	4 --- + theory limits explained, conclusive	4 --- considerable experimental or theoretical	4 --- interesting solution	4 --- overall clear, demonstrative	4 --- proved deep understanding	4 --- overall efficient	
5 --- deep and comprehensible, shows physical insight	5 --- detailed, complex, completely testable	5 --- + reproducible, convincing analysis	5 --- well fitting, deviations analysed, conclusive	5 --- considerable experimental and theoretical	5 --- greater extent than expected	5 --- + complex concepts well communicated			
6 ---									

NOTES:

+ effect explained deeply
+ many subpoints

-: unclear error estimation (program?)
-: no results shown for special fabrics

OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 2 + 1.5 - 0 = 4$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 --- too few, mostly irrelevant	0 --- relevant, aimed at resolving unclear points in the report	0 --- almost nothing	0 --- no or irrelevant	0 --- too few	0 --- no	0 --- poor	0 --- almost no	0 --- too few	0 --- poor	0 --- no	0 --- concise and correct or no questions asked -1 --- some incorrect, inconclusive or too long -2 --- deeply incorrect or show deep misconceptions
1 ---	1 --- + short, apt and clear, well prioritized, all time used	1 --- some main points	1 --- few	1 --- some	1 --- some	1 --- reasonable	1 --- few	1 --- some	1 --- some aspects fine	1 --- some	
2 ---		2 --- main points	2 --- some	2 --- some correct	2 --- reasonable	2 --- fair	2 --- some	2 --- some correct	2 --- good	2 --- reasonable	
3 ---		3 --- all relevant points	3 --- many	3 --- many correct	3 --- fair	3 --- efficient	3 --- good	3 --- many correct	3 --- some aspects efficient	3 --- fair	
4 ---		4 --- practically all points	4 --- practically all	4 --- + improvement suggestions	4 --- very good	4 --- + all time used	4 --- new crucial point(s)	4 --- + improvement suggestions	4 --- overall efficient	4 --- very good	

NOTES:

+ quite good presentation

- discussion, some irrelevant questions, relevant (error estimation) not discussed.

REVIEWER

Start from 1 and add/subtract

$$1 + 2 + 2 + 2 + 1 - 0 - 0 = 8$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 --- too few, mostly irrelevant	0 --- relevant, meant to clarify unclear points	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- poor/wrong	0 --- irrelevant	0 --- no	0 --- almost no	0 --- too few	-1 --- irrelevant	0 --- concise and correct or no questions asked -1 --- some incorrect, inconclusive or too long -2 --- deeply incorrect or show deep misconceptions
1 --- + suitably allotted to Rep & Opp, most time used	1 --- + short, apt and clear, well prioritized, time managed efficiently	1 --- partial	1 --- partially relevant	1 --- some	1 --- too short/long	1 --- partially relevant	1 --- some	1 --- too short/long	1 --- some	0 --- none	
2 ---		2 --- good	2 --- mostly adequate	2 --- reasonable	2 --- informative, apt	2 --- mostly adequate	2 --- reasonable	2 --- relevant parts	2 --- many	1 --- relevant, constructive	
3 ---		3 --- detailed, complex	3 --- fully adequate	3 --- good	3 --- condensed & accurate	3 --- fully adequate	3 --- good	3 --- accurate, conclusive	3 --- fully adequate		

NOTES:

REPORTER

Start from 1 and add/subtract



SCORESHEET

Stage: 4 Fight 2 A, Problem:

Hungary: *Czeesi*

Russia: *Truhirya*

BRG APP Innsbruck:

Write

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3				deviations	+ some interesting results	some aspects above average	some parts well done
4	good	good	well performed, sufficient number	qualitatively analysed	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
5	detailed demonstrative	quite detailed, correct	+ results explained, errors analysed	+ theory limits explained, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated
6	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive			
7							

DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	+ data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 --- concise and correct or no questions asked
- 1 --- some incorrect, inconclusive or too long
- 2 --- deeply incorrect or show deep misconceptions

NOTES:

no references

OPPONENT

Start from 1 and add/subtract

$$1 + 0 + 2 + 1 - 0 = 4$$

QUESTIONS ASKED

- 0 --- too few, mostly irrelevant
- 1 --- relevant, aimed at resolving unclear points in the report
- 2 --- + short, apt and clear, well prioritized, all time used

OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	main points	some	some correct	reasonable	fair
3	all relevant points	many	many correct	fair	efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	some	some correct	good	reasonable
3	good	many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 --- concise and correct or no questions asked
- 1 --- some incorrect, inconclusive or too long
- 2 --- deeply incorrect or show deep misconceptions

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 2 + 1 + 4 + 1 \pm 0 - 1 = 8$$

QUESTIONS ASKED

- 0 --- too few, mostly irrelevant
- 1 --- relevant, meant to clarify unclear points
- 2 --- + suitably allotted to Rep & Opp, most time used
- 3 --- + short, apt and clear, well prioritized, time managed efficiently

REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	partial	partially relevant	some
2	good	mostly adequate	reasonable
3	detailed, complex	fully adequate	good

REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	some
2	informative, apt	mostly adequate	reasonable
3	condensed & accurate	fully adequate	good

DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	almost no	too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

MISSED POINTS POINTED OUT

0	irrelevant
1	none
2	relevant, constructive

ANSWERS TO JURY QUESTIONS

- 0 --- concise and correct or no questions asked
- 1 --- some incorrect, inconclusive or too long
- 2 --- deeply incorrect or show deep misconceptions

NOTES:

statements not always true

not always correct

REPORTER

Start from 1 and add/subtract

$$1 + 3 + 1,5 - 0,5 = 5$$



SCORESHEET

Stage: 4 Fight 2 A, Problem: 13

Hungary: Marcel Csécsi

Russia:

sign

Nikita

BRG APP Innsbruck:

Weiß, Lisa

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	+ data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
- 1 — some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES:

OPPONENT

Start from 1 and add/subtract

$$1 + 0 + 1,5 + 1 - 0,5 = 3$$

QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- 1 — relevant, aimed at resolving unclear points in the report
- 2 — + short, apt and clear, well prioritized, all time used

OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	main points	some	some correct	reasonable	fair
3	all relevant points	many	many correct	fair	efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	some	some correct	good	reasonable
3	good	many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
- 1 — some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES:

REVIEWER

Start from 1 and add/subtract

$$1 + 2 + 2,5 + 2,25 + 1,25 - 0,5 - 0 = 9$$

QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- 1 — relevant, meant to clarify unclear points
- 2 — + suitably allotted to Rep & Opp, most time used
- 3 — short, apt and clear, well prioritized, time managed efficiently

REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	partial	partially relevant	some
2	good	mostly adequate	reasonable
3	detailed, complex	fully adequate	good

REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	some
2	informative, apt	mostly adequate	reasonable
3	condensed & accurate	fully adequate	good

DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	almost no	too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

MISSED POINTS POINTED OUT

- 0 — irrelevant
- 1 — none
- 2 — relevant, constructive

ANSWERS TO JURY QUESTIONS

- 0 — concise and correct or no questions asked
- 1 — some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES:

REPORTER

Start from 1 and add/subtract

$$1 + 4.5 + 2 - 0 = 8$$



SCORESHEET

Stage: 4 Fight 2 A, Problem:

Hungary: M (Cres)

Russia:

BRG APP Innsbruck:

sign

[Signature]

Zajki-Zechmeister, Krisztina

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 — almost no	0 — almost no	0 — too few	0 — no/ almost no	0 — others' data, incorrectly cited	0 — misunderstood	0 — unclear, chaotic	0 — too few	0 — poor	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — some	1 — some	1 — some	1 — some	1 — review of sources, cited	1 — partly	1 — partly clear	1 — some	1 — some aspects fine	
2 — fair	2 — fair	2 — fair	2 — not well fitting	2 — some own input	2 — average	2 — average	2 — many	2 — good	
3 — good	3 — good	3 — well performed, sufficient number	3 — deviations qualitatively analysed	3 — + some interesting results	3 — some aspects above average	3 — some parts well done	3 — + data/theory convincingly supported	3 — some aspects efficient	
4 — detailed demonstrative	4 — quite detailed, correct	4 — + results explained errors analysed	4 — + theory limits explained, conclusive	4 — considerable experimental or theoretical	4 — interesting solution	4 — overall clear, demonstrative	4 — proved deep understanding	4 — overall efficient	
5 — deep and comprehensive, shows physical insight	5 — detailed, complex, completely testable	5 — + reproducible, convincing analysis	5 — well fitting, deviations analysed, conclusive	5 — considerable experimental and theoretical	5 — greater extent than expected	5 — + complex concepts well communicated			
6 —	6 —	6 —	6 —	6 —	6 —	6 —			

NOTES:

nice presentation → how was the problem overcome
 → why is a Fourier analysis a good choice here

OPPONENT

Start from 1 and add/subtract

$$1 + 0 + 1.5 + 1 - 0 = 4$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 — too few, mostly irrelevant	0 —	0 — almost nothing	0 — no or irrelevant	0 — too few	0 — no	0 — poor	0 — almost no	0 — too few	0 — poor	0 — no	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — relevant, aimed at resolving unclear points in the report	1 —	1 — some main points	1 — few	1 — some	1 — some	1 — reasonable	1 — few	1 — some	1 — some aspects fine	1 — some	
2 — + short, apt and clear, well prioritized, all time used	2 —	2 — main points	2 — some	2 — some correct	2 — reasonable	2 — fair	2 — some	2 — some correct	2 — good	2 — reasonable	
	3 —	3 — all relevant points	3 — many	3 — many correct	3 — fair	3 — efficient	3 — good	3 — many correct	3 — some aspects efficient	3 — fair	
	4 —	4 — practically all points	4 — practically all	4 — + improvement suggestions	4 — very good	4 — + all time used	4 — new crucial point(s)	4 — + improvement suggestions	4 — overall efficient	4 — very good	

NOTES:

how did you find D fabric problem?

it is visible on all fabric
 no own opinion
 no

Sunny

REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1 + 2 + 1.5 - 0 - 0 = 6$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 — too few, mostly irrelevant	0 —	0 — poor/wrong	0 — irrelevant	0 — no	0 — poor/wrong	0 — irrelevant	0 — no	0 — almost no	0 — too few	-1 — irrelevant	0 — concise and correct or no questions asked -1 — some incorrect, inconclusive or too long -2 — deeply incorrect or show deep misconceptions
1 — relevant, meant to clarify unclear points	1 —	1 — partial	1 — partially relevant	1 — some	1 — too short/long	1 — partially relevant	1 — some	1 — too short/long	1 — some	0 — none	
2 — + suitably allotted to Rep & Opp, most time used	2 —	2 — good	2 — mostly adequate	2 — reasonable	2 — informative, apt	2 — mostly adequate	2 — reasonable	2 — relevant parts	2 — many	1 — relevant, constructive	
3 — + short, apt and clear, well prioritized, time managed efficiently	3 —	3 — detailed, complex	3 — fully adequate	3 — good	3 — condensed & accurate	3 — fully adequate	3 — good	3 — accurate, conclusive	3 — fully adequate		
	4 —										

NOTES:

Q: Parameters
 lines
 array

clear results
 were shown

comparison
 was not good
 missing