SCORESHEET
Stage: 1 Fight **2 Z**, Problem: 10
sign _[signature]_
Plesch, Martin

Poland: MUCHA   Gymnasium Freistadt: Germany Rosenheim: KIRCHHOF

Hinterreiter

REPORTER

Start from 1 and add/subtract

1 + 3 + 1 − $\square$ = 5

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							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	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 + 0.5 + 0.5 − $\square$ = $\frac{1}{2}$ 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 + 0.75 + 2 + 0 + 0 ± $+ 0.5$ − $\square$ = 4

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points + 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	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
	relevant parts	many
2	accurate, conclusive	fully adequate

MISSED POINTS POINTED OUT

−1	irrelevant
	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

$1 + \boxed{4.5} + \boxed{1} - \boxed{0.5} = \boxed{6}$

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			well performed, sufficient number ✗	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	good	good					
5	detailed demonstrative ✗	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical ✗	interesting solution ✗	overall clear, ✗ demonstrative
6							
7	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
	some ✗✗	some aspects fine ✗
1	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	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: show fitting ↓ error analysis of your theory to the real results! or at least an estimation

2) many different materials shapes :> lent too little about the external perturbations :<

you did not really discuss with your opponent! but you did again → jury

OPPONENT

Start from 1 and add/subtract

$1 + \boxed{0.5} + \boxed{2.5} + \boxed{1} - \boxed{1} = \boxed{4}$

QUESTIONS ASKED

0	✗ too few, mostly irrelevant
	✗ relevant, aimed at resolving
1	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:

you did not really discuss with the reporter

REVIEWER

Start from 1 and add/subtract

$1 + \boxed{0.5} + \boxed{2} + \boxed{0} + \boxed{1.5} \pm \boxed{0} - \boxed{1} = \boxed{4}$

QUESTIONS ASKED

0	too few, mostly irrelevant
	✗ relevant, meant to clarify unclear points
1	+ 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	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
	too short/long	some ✗
1	relevant parts	many
2	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

$1 + 4 + 1 - 0 = 6$

REPORT

0–7	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
4–5	detailed demonstrative ✗	quite detailed, correct	+ results explained errors analysed ✗	+ theory limits explained, conclusive	considerable experimental or theoretical ✗	interesting ✗ solution	overall clear, demonstrative ✗
6–7	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 ✗
	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	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

$1 + 0 + 2 + 1 - \cancel{1}0 = 4$

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)

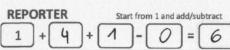|	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few ✗	no	poor
1	some main points	few	some	some	reasonable
2	main points ✗	some ✗	some correct	reasonable	fair ✗
3	all relevant points	many	many correct	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

$1 + 0{,}5 + 1{,}5 + 1 + 0{,}5 \oplus 0{,}5 - 0\cancel{0} = 4$

QUESTIONS ASKED

0	too few, mostly irrelevant
	✗ relevant, meant to clarify unclear points
1	+ 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	✗ 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
	relevant parts	many
2	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

$1 + \boxed{2.5} + \boxed{0.5} - \boxed{0} = \boxed{4}$

Poland: Gymnasium Freistadt: Germany Rosenheim:

REPORT $2.0 - 2.5$

0–7	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
3/4	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6/7	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 0.5

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

$1 + \boxed{0.5} + \boxed{1} + \boxed{0.5} - \boxed{0} = \boxed{3}$

QUESTIONS ASKED $0 - 0.5$

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

NOTES:

OPPOSITION (SPEECH) 1

	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 $0.0 - 0.5$

	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

REVIEWER

Start from 1 and add/subtract

$1 + \boxed{0.5} + \boxed{2.0} + \boxed{1} + \boxed{0.5} \pm \boxed{0.5} - \boxed{0.5} = \boxed{5}$

QUESTIONS ASKED

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

REVIEW OF REPORT $2 - 2.5$

	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 $0.5 - 1$

	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 $0.5 - 1$

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

MISSED POINTS POINTED OUT $0 - 0.5$

-1	irrelevant
0	none
	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

$1 + \boxed{2.75} + \boxed{2.75} - \boxed{0.5} = \boxed{5}$

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			well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	good	good					
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	many	good
2	+ data/theory convincingly supported	+ some aspects efficient
3	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

$1 + \boxed{0.5} + \boxed{1.75} + \boxed{1.25} - \boxed{0.5} = \boxed{4}$

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

$1 + \boxed{0.5} + \boxed{2.75} + \boxed{2.25} + \boxed{1.75} \pm \boxed{0} - \boxed{0.5} = \boxed{7}$

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points
	+ 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	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
	relevant parts	many
2	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 + 3 + 0 − 0 = 4

Poland: P. M.   Gymnasium Freistadt: F. Hinterreiter   Germany Rosenheim: Q. Kirchhof

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no **X**	too few	no/ almost no **X**	others' data, incorrectly cited	misunderstood **X**	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly **X**	partly clear
2	fair	fair	fair **X**	not well fitting	some own input **X**	average	average **X**
3	good **X**	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done **X**
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

(rows 6/7 labels combined as printed)

DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0		
	too few **X**	poor
	some	some aspects fine
1	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	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 + 0 − 0 = 2

QUESTIONS ASKED

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

NOTES:

OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few **X**	no	poor
1	some main points **X**	few	some	some **X**	reasonable **X**
2	main points **X**	some **X**	some correct	reasonable **X**	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 **X**	too few **X**	poor **X**	no **X**
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: About 8 minutes left on clock

REVIEWER

Start from 1 and add/subtract

1 + 1.5 + 2 + 1.5 + 0.5 − 0.5 − 0.75 = 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	partial	partially relevant	some
2	good **X**	mostly adequate **X**	reasonable **X**
3	detailed, complex	fully adequate	good

REVIEW OF OPPOSITION

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

DISCUSSION ANALYSIS

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

MISSED POINTS POINTED OUT

−1	irrelevant **X**
0	none **X**
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: Brought up aspekts that are most likely irrelevant Criticised

SCORESHEET

sign _[signature]_ Plesch, Martin

Stage: 2 Fight **2 Z**, Problem:

Gymnasium Freistadt: KÄFFRICK Germany Rosenheim: AUROMIS Iran: MGHTDI7

REPORTER 3

$$1 + \boxed{2.75} + \boxed{1.5} - \boxed{} = \boxed{6}$$

Start from 1 and add/subtract

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 aspects	some parts
4	good	good	well performed, sufficient number	qualitatively analysed	+ some interesting results	above average	well done
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	some	some aspects fine
1	(many)	good
2	+ data/theory convincingly supported	some aspects efficient
3	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

$$1 + \boxed{0.75} + \boxed{1} + \boxed{2.5} - \boxed{0.5} = \boxed{5}$$

Start from 1 and add/subtract

QUESTIONS ASKED

0	too few, mostly irrelevant
(○)	relevant, aimed at resolving unclear points in the report
1	
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: Vážam :-(

Pros fine, cons not that much

REVIEWER

$$1 + \boxed{1.75} + \boxed{1.5} + \boxed{1.5} + \boxed{1} \pm \boxed{} - \boxed{} = \boxed{7}$$

Start from 1 and add/subtract

QUESTIONS ASKED

0	too few, mostly irrelevant
	relevant, meant to clarify unclear points
1	+ 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	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
	relevant parts	many
2	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:

SCORESHEET

sign *Rachel Bra[...]* Beck, Anatol

Stage: 2 Fight **2 Z**, Problem:

Gymnasium Freistadt: Rep.   **Germany Rosenheim:** Op.   **Iran:** Rev.

REPORTER

$1 + \boxed{3,5} + \boxed{2} - \boxed{0,5} = \boxed{6}$ Start from 1 and add/subtract

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			well performed, ✗	deviations		some aspects	some parts
4	good ✗	good	sufficient number ✗	qualitatively analysed	+ some interesting results ✗	above average ✗	well done
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
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
7							

DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
	some	some aspects fine
1	many ✗	good ✗
2	+ data/theory convincingly supported	some aspects efficient ✗
3	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: how did data fit the model? *Terror analysis* is missing → show the transition from Helmholtz to the standing wave regime with experiments! Explain why a standing wave forms in an open bottle or jaw bottle   please next time

OPPONENT

$1 + \boxed{1} + \boxed{2,5} + \boxed{2,5} - \boxed{0} = \boxed{7}$ Start from 1 and add/subtract

QUESTIONS ASKED

0	too few, mostly irrelevant
1 ✗	relevant, aimed at resolving undear 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: stated her own thoughts, but could not explain ~~why is the resonance frequency irrelevant?~~ 1) good way of discussing 2) pointed out the importance of the frequency change with time

REVIEWER

$1 + \boxed{1,5} + \boxed{2} + \boxed{2} + \boxed{1} \pm \boxed{0} - \boxed{0} = \boxed{7}$ Start from 1 and add/subtract

QUESTIONS ASKED

0	too few, mostly irrelevant
	relevant, meant to clarify unclear points
1 ✗	+ 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	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
	too short/long	some ✗
1	relevant parts ✗	many
2	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 + 4 + 3 − 0 = 8

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							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive ✗	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	some	some aspects fine
1	many	good
	+ data/theory convincingly supported	some aspects efficient
2		
3	✗ 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 + 2 + 3 + 3 − 1 = 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 + $0,5$ + 2 + 2 + 1 ± -0 − -0 = 6

QUESTIONS ASKED

0	too few, mostly irrelevant
1	✗ relevant, meant to clarify unclear points
	+ 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	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
	too short/long	some
1	relevant parts ✗	many
2	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

1 + 2 + 1 − 0.5 = 3.4

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0							
1	almost no	almost no	(too few)	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
2	some	(some)	(some)	some	review of sources, cited	(partly)	partly clear
3	(fair)	fair	(fair)	not well fitting	(some own input)	average	(average)
4	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental _or_ theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	(some)	some aspects fine
1	(many)	good
2	+ data/theory convincingly supported	some aspects efficient
3	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

1 + 1 + 2 + 1 − 0 = 5

QUESTIONS ASKED 1 − 1,5

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) 1,5 − 2

	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

1 + 1 + 1.5 + 1 + 0.5 ± 0 − 0 = 5

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points
	+ 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	(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)
	relevant parts	many
2	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:

SCORESHEET

Stage: 2 Fight **2 Z**, Problem: **5**

sign _[signature]_   Pfleger, Alexander

Gymnasium Freistadt: Germany Rosenheim: Iran:

REPORTER

Start from 1 and add/subtract

$1 + 4 + 1 - 1 = 5$

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							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	some	some aspects fine
1	many	good
	+ data/theory convincingly supported	some aspects efficient
2		
3	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

$1 + 0.75 + 2.5 + 2.5 - 0.75 = 6$

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

$1 + 1.5 + 2 + 2 + 0.5 \pm 0 - 0 = 6$

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points
2	+ suitably allotted to Rep & Opp, most time used
	+ 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
	relevant parts	many
2	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:

SCORESHEET
Stage: 2 Fight **2 Z**, Problem: 5
Gymnasium Freistadt; A. Käferböck; Germany Rosenheim; C. Ahrens; Iran: M. Moghadam

sign _(signature)_ Worm, Paul

REPORTER

Start from 1 and add/subtract

$1 + 1.75 + 0.5 - 0.5 = 3$

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							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	some ✗	some aspects fine ✗
1	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	proved deep understanding	overall efficient

ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

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

NOTES:

OPPONENT

Start from 1 and add/subtract

$1 + 0.5 + 2.0 + 1.5 - 0 = 5$

QUESTIONS ASKED

0	too few, mostly irrelevant
✗	relevant, aimed at resolving unclear points in the report
1	
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 ⓪
-1	some incorrect, inconclusive or too long
-2	deeply incorrect or show deep misconceptions

NOTES:

REVIEWER

Start from 1 and add/subtract

$1 + 1.25 + 1.5 + 1.5 + 0.5 - 0.75 - 0 = 5$

QUESTIONS ASKED

0	too few, mostly irrelevant
	relevant, meant to clarify unclear points
1 ✗	+ 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	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
	relevant parts	many
2	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 ⓪
-1	some incorrect, inconclusive or too long
-2	deeply incorrect or show deep misconceptions

NOTES:

SCORESHEET

Stage: 3 Fight **2 Z**, Problem:

Germany Rosenheim: Kirchhof   Iran: Mohseni   Poland: Supel

sign _____

REPORTER

1 + [0.75] + [0.75] − [ ] = [2]

Start from 1 and add/subtract

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0							
1	almost no	almost (no)	too few	(no) almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
	some →wrong?	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							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
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
7							

DISCUSSION WITH OPPONENT

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

1 + [0.8] + [1.8] + [2.5] − [ ] = [6]

Start from 1 and add/subtract

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:

OIL −

REVIEWER

1 + [1.5] + [2] + [1.5] + [1] ± [ ] − [1] = [6]

Start from 1 and add/subtract

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points + 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	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
	too short/long	some
1	relevant parts	many
2	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:

Avs 5

− REFERENCE   PRAZE

there are some experiments you should have performed, even without using your setup.

sign *[signature]*   Beck, Anatol

SCORESHEET

Stage: 3 Fight 2 Z, Problem:

Germany Rosenheim: Rep.   **Iran:** Op.   **Poland:** Rev.

REPORTER

$1 + \boxed{0,5} + \boxed{1} - \boxed{0} = \boxed{2}$ Start from 1 and add/subtract

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
3-4	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done ✗
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6-7	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
	many	good ✗
2	+ data/theory convincingly supported	some aspects efficient
3	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: the mass theory of the rising bubble is not founded by your thoughts! → you have to cite the theory/hypothesis

OPPONENT

$1 + \boxed{1,5} + \boxed{1,5} + \boxed{1 ~~\sout{}} - \boxed{0,5} = \boxed{5}$ Start from 1 and add/subtract

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: very good question: oil instead of air!

could have asked more about his intuition of formulas!

could not point out why you disagree with the mean model

the question with the time-depending position could not lead anywhere since the reporter did not quantify anything for the rising process!

REVIEWER

$1 + \boxed{1} + \boxed{2} + \boxed{1,5} + \boxed{1,5} \pm \boxed{\sout{}} - \boxed{0,5} = \boxed{6}$ Start from 1 and add/subtract

QUESTIONS ASKED

0	too few, mostly irrelevant
	relevant, meant to clarify unclear points
1 ✗	+ 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	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
	relevant parts ✗	many ✗
2	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
✗	some incorrect, inconclusive or too long
-1	inconclusive or too long
-2	deeply incorrect or show deep misconceptions

NOTES: brought own thoughts of initial velocity dependency → but you have to explain why!

REPORTER

Start from 1 and add/subtract

$1 + \boxed{1} + \boxed{1} - \boxed{2} = \boxed{1}$

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							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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 ✗
	some	some aspects fine ✗
1	many ✗	good
2	+ data/theory convincingly supported	some aspects efficient
3	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

$1 + \boxed{1} + \boxed{2} + \boxed{3} - \boxed{1} = \boxed{6}$

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

NOTES:

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

REVIEWER

Start from 1 and add/subtract

$1 + \boxed{1} + \boxed{1.5} + \boxed{1} + \boxed{0.5} \pm \boxed{+1} - \boxed{1} = \boxed{5}$

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points; + 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	✗ 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
	relevant parts	many
2	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 + 1 + 1 − 1 = 2

REPORT 0.5 - 1

	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
3/4	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6/7	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
	some	some aspects fine
1	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	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 + 0.5 + 2 + 1.5 − 0.5 = 5

QUESTIONS ASKED 0 - 0.5

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) 2 - 2.5

	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 1 - 2

	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 + 0.5 + 1.0 + 2 + 0.5 ± 0 − 1 = 4

QUESTIONS ASKED 0 - 0.5

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

REVIEW OF REPORT 1 - 1.5

	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 2

	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 0.5

	discussion evaluation	correct own opinions
0	almost no	too few
	too short/long	some
1	relevant parts	many
2	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 + $1,75$ + $0,75$ − $0,5$ = 3

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							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	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 + $1,5$ + $1,25$ − $0,75$ = 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 + $2,25$ + $2,25$ + 1 ± $0,5$ − $0,5$ = 8

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points
	+ 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	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
	relevant parts	many
2	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:

SCORESHEET
Stage: 3 Fight 2 Z, Problem: 16
Germany Rosenheim: Q. Kirchhoff, N. Mohseni   Poland: H. Supel

REPORTER

1 + [1.25] + [0.75] − [0] = [3]

Start from 1 and add/subtract

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no X	too few X	no/ almost no X	others' data, incorrectly cited	misunderstood	unclear, chaotic X
1	some X	some	some	some	review of sources, cited	partly X	partly clear X
2	fair	fair	fair	not well fitting	some own input X	average	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	X some	X some aspects fine
1	many	good
	+ data/theory convincingly supported	some aspects efficient
2	proved deep understanding	overall efficient
3		

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: About 5:30 Min still on clock

OPPONENT

1 + [0.5] + [2.5] + [1.5] − [0] = [6]

Start from 1 and add/subtract

QUESTIONS ASKED

0	too few, mostly irrelevant
X	relevant, aimed at resolving unclear points in the report
1	
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 X	some	reasonable
2	main points X	some X	some correct	reasonable X	fair X
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 X	some aspects fine	some X
2	X some	some correct	good	reasonable
	X good	many correct	some aspects efficient	fair
3				
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

1.0

1 + [0.5] + [2] + [2] + [0] + [0.75] − [~~0.25~~] = [4]

Start from 1 and add/subtract

QUESTIONS ASKED

0	too few, mostly irrelevant
X	relevant, meant to clarify unclear points
1	+ 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	partial	partially relevant X	X some
2	X 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 X
2	informative, apt	mostly adequate X	reasonable
3	condensed & accurate	fully adequate	good

DISCUSSION ANALYSIS

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

MISSED POINTS POINTED OUT

-1	irrelevant O
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: Only one question

sign _____

Plesch, Martin

Iran: KHATIB   Poland: PETRYJAK   Gymnasium Freistadt: KÄFERBÖCK

REPORTER

Start from 1 and add/subtract

1 + 2.25 + 1.25 - 0.5 = 4

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			well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	good	good					
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
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
7							

NOTES: short

DISCUSSION WITH OPPONENT

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

OPPONENT

Start from 1 and add/subtract

1 + 1.5 + 1.5 + 2.5 - $\ $ = 6

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

NOTES:

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

Agree with theory?

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

kin the   Def. decay

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

REVIEWER

Start from 1 and add/subtract

1 + 0.75 + 1.5 + 0.6 + 0.75 ± $\ $ - $\ $ = 5

QUESTIONS ASKED

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

NOTES:

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
	relevant parts	many
2	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: OPINIONS ON THEORY MISSING

IYPT – March 2019

REPORTER 2 Start from 1 and add/subtract

$1 + \boxed{5} + \boxed{\$} - \boxed{0} = \boxed{8}$

Iran: Rep.   Poland: Op.   Gymnasium Freistadt: Rev.

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							
5	detailed demonstrative ✗	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical ✗	interesting solution ✗	overall clear, demonstrative ✗
6							
7	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
	many ✗	good ✗
2	+ data/theory ✗ convincingly supported	some aspects efficient
3	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: the formula was too complex for your end   tried for different radii!   theory was ~~also~~ understood but

→ you asked a lot but answered little

→ you raised the energy ~~conservation~~ loss due to the collision and that it could ~~easy~~ be extracted from exp.

not few one you showed why in the "theory" part

well fitted with theory

OPPONENT Start from 1 and add/subtract

$1 + \boxed{1} + \boxed{2\$} + \boxed{2} - \boxed{0} = \boxed{7}$

QUESTIONS ASKED

0	too few, mostly irrelevant
	relevant, aimed at resolving unclear points in the report
1 ✗	
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: how can you ~~seto~~ agree with the complex theory without any evidence it fits the experiments?   e.g. why is theory valid? why do you what would be an easier/ your approach?

→ ~~could~~ if reporter doesn't have data, ask kindly for it and if rep. says "no" then leave it or let her explain it she does not know the data

---

REVIEWER 1 Start from 1 and add/subtract

$1 + \boxed{\sout{45}} + \boxed{\sout{2}} + \boxed{\sout{15}} + \boxed{1} \pm \boxed{0} - \boxed{0} = \boxed{6}$

QUESTIONS ASKED

0	too few, mostly irrelevant
	relevant, meant to clarify unclear points
1 ✗	+ 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	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 ✗
	too short/long	some
1	relevant parts ✗	many
2	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:

↳ you have to state your opinion!

REPORTER

Start from 1 and add/subtract

$1 + 3,5 + 1,5 - 0 = 6$

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 6 7	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
	some	some aspects fine
1	✗ many	✗ good
2	+ data/theory convincingly supported	some aspects efficient
3	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

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

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

$1 + 2 + 2 + 2 + 1 ± 0,5 - 0,5 = 7$

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points + 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	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
	too short/long	some
1	✗ relevant parts	✗ many
2	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:

SCORESHEET
Stage: 4 Fight **2 Z**, Problem: /5

sign

Mnevets, Daniil

Iran:

Poland:

Gymnasium Freistadt:

REPORTER

Start from 1 and add/subtract

$1 + \boxed{3.5} + \boxed{1} - \boxed{1} = \boxed{5}$

REPORT $2 - 3.5$

	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 aspects	some parts
4	(good)	good	well performed, sufficient number	qualitatively analysed	(+ some interesting results)	above average	well done
5	detailed	quite detailed,	+ results explained	+ theory limits	considerable experimental	interesting	overall clear,
6	demonstrative	correct	errors analysed	explained, conclusive	or theoretical	solution	demonstrative
7	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:

DISCUSSION WITH OPPONENT 0.5 (-1)

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

OPPONENT

Start from 1 and add/subtract

$1 + \boxed{1} + \boxed{3} + \boxed{2} - \boxed{0} = \boxed{7}$

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

NOTES:

OPPOSITION (SPEECH) 2 < 3

	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 1.5 - 2

	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

REVIEWER

Start from 1 and add/subtract

$1 + \boxed{0} + \boxed{1.5} + \boxed{1.5} + \boxed{1} \pm \boxed{0} - \boxed{0} = \boxed{5}$

QUESTIONS ASKED 0 - 0.5

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

NOTES:

REVIEW OF REPORT 1 - 1.5

	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 1.5 - 2

	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)
	too short/long	(some)
1	(relevant parts)	many
2	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:

Iran: Poland: **Gymnasium Freistadt:**

REPORTER

Start from 1 and add/subtract

$1 + \boxed{3} + \boxed{1} - \boxed{1} = \boxed{4}$

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
3/4	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6/7	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
	some	some aspects fine
1	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	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

$1 + \boxed{1} + \boxed{3} + \boxed{2} - \boxed{0} = \boxed{7}$

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:

REVIEWER

Start from 1 and add/subtract

$1 + \boxed{9.5} + \boxed{2.25} + \boxed{2.25} + \boxed{1} \pm \boxed{0} - \boxed{0} = \boxed{7}$

QUESTIONS ASKED

0	too few, mostly irrelevant
1	relevant, meant to clarify unclear points + 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	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
	too short/long	some
1	relevant parts	many
2	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 3

Start from 1 and add/subtract

$1 + \text{[2.5]} + 0.5 - 0 = 5$

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							
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
6							
7	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
	many	good
2	+ data/theory convincingly supported	some aspects efficient
3	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 3

Start from 1 and add/subtract

$1 + 1 + \text{[2.5]} + 1.5 - 0 = 7$

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:

REVIEWER

Start from 1 and add/subtract

$1 + 0.5 + 2 + 1.5 + 0.5 \pm 0 - 0 = 6$

QUESTIONS ASKED

0	too few, mostly irrelevant
	relevant, meant to clarify unclear points
1	+ 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	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
	too short/long	some
1	relevant parts	many
2	accurate, conclusive	fully adequate

MISSED POINTS POINTED OUT

-1	irrelevant
	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: