SCORESHEET

stage: 1 | fight (round no.): 5 | room: B | problem no.: 9 | Juror's name: Feng Song

reporter: AUSTRALIA | opponent: HUNGRY | reviewer: SWEDEN | signature: Feng Song

REPORTER

Start from 1 and add/subtract

1 + [1.] + [2] - [0] = [3]

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	X fair	X fair	X fair	not well fitting	some own input	X average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution
4						
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average
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

DISCUSSION WITH OPPONENT

	scientific contribution	relevant arguments/responses	efficiency
0	almost no	too few	almost no, chaotic
1	only technical points cleared	some	avoided some questions
2	X some scientific points cleared	X many	~~X~~ cooperated well
3	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions
4	brought in new physics	proved deep understanding	efficient, productive

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

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

NOTES:

OPPONENT

Start from 1 and add/subtract

1 + [1] + [2] + [2] - [0] = [6]

QUESTIONS ASKED

- 0 — almost no, irrelevant
- 1 — X some relevant, aimed at resolving some unclear points
- 2 — short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no	almost nothing	no or irrelevant	almost no	no
1	very little	some main points	X few	some	~~X~~ almost no
2	X not all	X main points	some	to important topics	some
3	almost all	all relevant points	many	to most topics	reasonable
4	all & efficiently	practically all points	practically all	+ improvement suggestions	very good

DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
0	almost no	X irrelevant	very little	almost no	no
1	X little	some	X some	X to some extent	X almost no
2	X partial	average	some correct	leading or cooperative	some
3	good	many	many correct	quite efficient	reasonable
4	new crucial point(s)	almost all	+ improvement suggestions	very 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] + [2] - [0] = [6]

QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- 1 — some relevant, sufficient number, could clear things out
- 2 — X most time used, many unclear points resolved, aimed at both rep. and opp.
- 3 — +short, apt and clear, well prioritized time managed efficiently

REVIEW OF REPORT

	report summary & understanding	discussion analysis	own opinions	pros & cs	prioritisation
0	poor	almost no	too few	irrelevant	no
1	X partial	too short/long	X some	X partially relevant	X almost no
2	X good	X relevant parts	X many	mostly adequate	some
3	detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good

REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cs	prioritisation
0	poor	almost no	too few	irrelevant	no
1	too short/long	too short/long	some	partially relevant	almost no
2	informative, apt	relevant parts	many	mostly adequate	some
3	brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good

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: 1 | fight (round no.): 5 | room: B | problem no.: 9 | Juror's name: MATEJ BADIN

reporter: Kwang-Ning Tham AUSTRALIA | opponent: Hungary | reviewer: Sweden | signature: Matej Badin

REPORTER

Start from 1 and add/subtract

1 + 2 + 2 − 0.5 = 5

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average
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

DISCUSSION WITH OPPONENT

	scientific contribution	relevant arguments/responses	efficiency
0	almost no	too few	almost no, chaotic
1	only technical points cleared	some	avoided some questions
2	some scientific points cleared	many	cooperated well
3	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions
4	brought in new physics	proved deep understanding	efficient, productive

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
- -0.5 — some incorrect, inconclusive or too long
- -1 — deeply incorrect or show deep misconceptions
- -2

NOTES:

$d_1[g_1][z_1]\omega$ | equilibrium position?

Drag Stoke's law [ ] the [Q]

(h) Could be written much simpler if you separate the components

theoretical $r_{min} = \frac{9}{tg\,2\,\omega^2}$

(11) $\int_{in} V \cos^2\theta \omega^2 x$?

Q: Comparing the experiment ?! Doesn't show good correlation between the model and results.

OPPONENT

Start from 1 and add/subtract

1 + 1 + (2; 2.5) + 2 − 0 = 6

QUESTIONS ASKED

- 0 — almost no, irrelevant
- 1 — some relevant, aimed at resolving some unclear points
- 2 — short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no	almost nothing	no or irrelevant	almost no	no
1	very little	some main points	few	some	almost no
2	not all	main points	some	to important topics	some
3	almost all	all relevant points	many	to most topics	reasonable
4	all & efficiently	practically all points	practically all	+ improvement suggestions	very good

DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
0	almost no	irrelevant	very little	almost no	no
1	little	some	some	to some extent	almost no
2	partial	average	some correct	leading or cooperative	some
3	good	many	many correct	quite efficient	reasonable
4	new crucial point(s)	almost all	+ improvement suggestions	very 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
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NOTES: Q: frequency, velocity, position of small ball ← radius of the ball

- very good understanding of the problem
- could be more specific in describing what has been done

Q: What is the stabilization mechanism which stabilizes the unstable equilibrium?

- Setup
- Motion
- Experiments ??!

Theory! Experiment comparison was addressed in speech, but not questioned in....

REVIEWER

Start from 1 and add/subtract

1 + 1.5 + 2 + 1 − 0 = 6

QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- 1 — some relevant, sufficient number, could clear things out
- 2 — most time used, many unclear points resolved, aimed at both rep. and opp.
- 3 — +short, apt and clear, well prioritized time managed efficiently

REVIEW OF REPORT

	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	partial	too short/long	some	partially relevant	almost no
2	good	relevant parts	many	mostly adequate	some
3	detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good

REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	too short/long	too short/long	some	partially relevant	almost no
2	[illegible]ve, apt	relevant parts	many	mostly adequate	some
3	brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good

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:

Q: · air bubble location of the ball

Stability - irrelevant

Q: · $\mp(\frac{k}{k}(\mp))$ What this

Stability - irrelevant can't have been discussed for actually a very long time

SCORESHEET

stage: 1 | fight (round no.): 5 | room: B | problem no.: 9 | Juror's name: chew Lock Yue

reporter: Australia | opponent: Hungary | reviewer: Sweden | signature: [signature]

REPORTER

Start from 1 and add/subtract

1 + 3 + 3 - 0 = 7

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	average
3	good X	good X	well performed, sufficient number X	deviations qualitatively analysed X	some interesting results X	interesting solution X
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average
5						
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

DISCUSSION WITH OPPONENT

	scientific contribution	relevant arguments/responses	efficiency
0	almost no	too few	almost no, chaotic
1	only technical points cleared	some	avoided some questions
2	some scientific points cleared	many	cooperated well
3	interesting points discussed X	+ data/theory convincingly supported X	answered directly to most questions X
4	brought in new physics	proved deep understanding	efficient, productive

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

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

NOTES:

OPPONENT

Start from 1 and add/subtract

1 + 1 + 2 + 2 - 0 = 6

QUESTIONS ASKED

0	almost no, irrelevant
1	some relevant, aimed at resolving some unclear points X
2	short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no	almost nothing	no or irrelevant	almost no	no
1	very little	some main points	few	some	almost no
2	not all X	main points X	some X	to important topics X	some X
3	almost all	all relevant points	many	to most topics	reasonable
4	all & efficiently	practically all points	practically all	+ improvement suggestions	very good

DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
0	almost no	irrelevant	very little	almost no	no
1	little	some	some	to some extent	almost no
2	partial X	average X	some correct X	leading or cooperative X	some X
3	good	many	many correct	quite efficient	reasonable
4	new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

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

NOTES:

REVIEWER

Start from 1 and add/subtract

1 + 1 + 1.5 + 1.5 - 0 = 5

QUESTIONS ASKED

0	too few, mostly irrelevant
1	some relevant, sufficient number, could clear things but X
2	most time used, many unclear points resolved, aimed at both rep. and opp.
3	+short, apt and clear, well prioritized time managed efficiently

REVIEW OF REPORT

	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	partial X	too short/long X	some X	partially relevant X	almost no X
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REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
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ANSWERS TO JURY QUESTIONS

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NOTES:

SCORESHEET

stage: 1 | fight (round no.): 5 | room: B | problem no.: 9 | Juror's name: MAMOIKA A.

reporter: Austalia | opponent: Hungary | reviewer: Sweden | signature:

REPORTER

Start from 1 and add/subtract

1 + [2,5] + [1,5] - [1] = [5]

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
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3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution
4			+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average
5	detailed demonstrative	quite detailed, correct				
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

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ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
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NOTES:

OPPONENT

Start from 1 and add/subtract

1 + [1,5] + [1,5] + [2] - [0] = [6]

QUESTIONS ASKED

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OPPOSITION (SPEECH)

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DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
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ANSWERS TO JURY and REVIEWER'S QUESTIONS

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NOTES:

REVIEWER

Start from 1 and add/subtract

1 + [2,0] + [3] + [2] - [0] = [8]

QUESTIONS ASKED

- 0 — too few, mostly irrelevant
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- 3 — +short, apt and clear, well prioritized time managed efficiently

REVIEW OF REPORT

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REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
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ANSWERS TO JURY QUESTIONS

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NOTES:

SCORESHEET

stage: 1 | fight (round no.): 5 | room: B | problem no.: 9 | Juror's name: T. OPATRNÝ

reporter: AUSTRALIA | opponent: HUNGARY | reviewer: SWEDEN | signature: T. O.

REPORTER

Start from 1 and add/subtract

1 + 2.5 + 2.5 - [ ] = 6

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
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ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

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NOTES:

OPPONENT

Start from 1 and add/subtract

1 + 1 + 2.5 + 2.5 - [ ] = 7

QUESTIONS ASKED

- 0 — almost no, irrelevant
- 1 — some relevant, aimed at resolving some unclear points
- 2 — short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
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DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
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ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
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NOTES:

REVIEWER

Start from 1 and add/subtract

1 + 2 + 2 + 2 - [ ] = 7

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REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
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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 (round no.): 5 | room: B | problem no.: 2 | Juror's name: Feng Song

reporter: HUNGRY | opponent: SWEDEN | reviewer: AUSTRALIA | signature: Feng Song

REPORTER

Start from 1 and add/subtract

1 + 2 + 3 - 1 = 5

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	X fair	fair	X fair	X not well fitting	some own input	X average
3	good	X good	well performed, sufficient number	deviations qualitatively analysed	X some interesting results	X interesting solution
4						
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average
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	scientific contribution	relevant arguments/responses	efficiency
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4	brought in new physics	proved deep understanding	efficient, productive

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

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

NOTES:

OPPONENT

Start from 1 and add/subtract

1 + 1 + 2 + 2 - 0 = 6

QUESTIONS ASKED

- 0 almost no, irrelevant
- 1 X some relevant, aimed at resolving some unclear points
- 2 short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no	almost nothing	no or irrelevant	almost no	no
1	very little	some main points	X few	X some	almost no
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DISCUSSION WITH REPORTER

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4	new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 X concise and correct or no questions asked
- -1 some incorrect, inconclusive or too long
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NOTES:

REVIEWER

Start from 1 and add/subtract

1 + 2 + 2 + 1 - 0 = 6

QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 some relevant, sufficient number, could clear things out
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REVIEW OF REPORT

	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
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REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
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ANSWERS TO JURY QUESTIONS

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

NOTES:

SCORESHEET

stage: 11 | fight (round no.): 5 | room: B | problem no.: 2 | Juror's name: MATEJ BADIN

reporter: HUNGARY | opponent: SWEDEN | reviewer: AUSTRALIA | signature: [signature]

REPORTER

Start from 1 and add/subtract

1 + [redacted] + 2 - 0.5 = [redacted]8

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
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3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution
4						
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	[redacted] or theoretical	some aspects above average
6	[redacted]	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected

DISCUSSION WITH OPPONENT

	scientific contribution	relevant arguments/responses	efficiency
0	almost no	too few	almost no, chaotic
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ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
- -0.5 — some incorrect, inconclusive or too long
- -1 — deeply incorrect or show deep misconceptions
- -2

NOTES: DRUM THEORY ++ TUBE ? Bacoustic correction and correction... CLOSED/PIPE

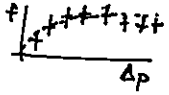
THEORY FOR MODEL DISPERSION RELATION ↓ OWN CONTRIBUTION

$\frac{k_0 A}{D} k = \cot g(kL)$

→ STILL SOME DEVIATION

Q: WHAT NOT IS REACHED EQUILIBRIUM

Q: WHY IS STEADY STATE NOT REACHED ?



OPPONENT

Start from 1 and add/subtract

1 + 2 + 1.5 + 2 - 0 = [redacted]6

QUESTIONS ASKED

- 0 — almost no, irrelevant
- 1 — some relevant, aimed at resolving some unclear points
- 2 — short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no	almost nothing	no or irrelevant	almost no	no
1 1.5	very little	some main points	few	some	~~almost no~~
2	not all	main points	some	to important topics	some
3	almost all	all relevant points	many	to most topics	reasonable
4	all & efficiently	practically all points	practically all	+ improvement suggestions	very good

DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
0	almost no	irrelevant	very little	almost no	no
1	little	some	some	to some extent	almost no
2	partial	average	some correct	leading or cooperative	some
3	good	many	[redacted]	quite efficient	reasonable
4	new crucial point(s)	almost all	+ improvement suggestions	very 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:

Q: · relevant parameters of the end the system

· end correction

THEORICAL MODEL - how we get it - irrelevant 20 membrane EXPERIMENT

could have given more insight into physics why does point are crucial, are how they part of the rest

END correction...

He does not pay enough attention to the answers.

HOW IT IS

REVIEWER

Start from 1 and add/subtract

1 + 1 + (2.2.5) + 2.5 - 0 = 7

SPEECH CONTENT poor good DISCUSSION

QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- 1 — some relevant, sufficient number, could clear things out
- 2 — most time used, many unclear points resolved, aimed at both rep. and opp.
- 3 — +short, apt and clear, well prioritized time managed efficiently

REVIEW OF REPORT

	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	partial	too short/long	some	partially relevant	almost no
2	good	relevant parts	many	mostly adequate	some
3	detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	[redacted]

REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	too short/long	too short/long	some	partially relevant	almost no
2 2.5	informative, apt	relevant parts	many	mostly adequate	some
3	brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good

ANSWERS TO JURY QUESTIONS

- 0 — concise and correct or no questions asked
- -1 — some incorrect, inconclusive or too long
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NOTES:

Q: :

· MEMBRANE ×

Q: What did you mean by the color of the balloon

SCORESHEET

stage: 2 | fight (round no.): 5 | room: B | problem no.: 2 | Juror's name: Chen Locle Yuan

reporter: Hungary | opponent: Sweden | reviewer: Australia | signature: Chen

REPORTER

Start from 1 and add/subtract

1 + [5] + [2] - [0] = [8]

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution
4						
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average
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

DISCUSSION WITH OPPONENT

	scientific contribution	relevant arguments/responses	efficiency
0	almost no	too few	almost no, chaotic
1	only technical points cleared	some	avoided some questions
2	some scientific points cleared	many	cooperated well
3	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions
4	brought in new physics	proved deep understanding	efficient, productive

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

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

NOTES:

OPPONENT

Start from 1 and add/subtract

1 + [1] + [2] + [2] - [0] = [6]

QUESTIONS ASKED

- 0: almost no, irrelevant
- 1: some relevant, aimed at resolving some unclear points
- 2: short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
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1	very little	some main points	few	some	almost no
2	not all	main points	some	to important topics	some
3	almost all	all relevant points	many	to most topics	reasonable
4	all & efficiently	practically all points	practically all	+ improvement suggestions	very good

DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
0	almost no	irrelevant	very little	almost no	no
1	little	some	some	to some extent	almost no
2	partial	average	some correct	leading/or cooperative	some
3	good	many	many correct	quite efficient	reasonable
4	new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good

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NOTES:

SCORESHEET

stage: 2 | fight (round no.): ~~5~~ | room: B | problem no.: 2 | Juror's name: MANOIKA

reporter: | opponent: | reviewer: Australie | signature:

REPORTER

Start from 1 and add/subtract

1 + [4,5] + [1,5] - [0] = [7]

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
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2	fair	fair	fair	not well fitting	some own input	average
3	good	good	well performed, sufficient number ✗	✓ deviations qualitatively analysed	some interesting results	interesting solution
4					✗	
5	detailed ✗ demonstrative	quite detailed, correct ✓	+ results explained errors analysed ✗	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects ✓ above average
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

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	scientific contribution	relevant arguments/responses	efficiency
0	almost no	too few	almost no, chaotic
1	only technical points cleared	some	✗ avoided some questions
2	✗ some scientific points cleared	✓ many	cooperated well
3	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions efficient, productive
4	brought in new physics	proved deep understanding	

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

0	concise and correct or no questions asked
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NOTES:

OPPONENT

Start from 1 and add/subtract

1 + [1] + [2] + [1,5] - [0,5] = [5]

QUESTIONS ASKED

0	almost no, irrelevant
1	✓ some relevant, aimed at resolving ✗ some unclear points
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NOTES:

REVIEWER

Start from 1 and add/subtract

1 + [0,5] + [1,5] + [2,5] - [0] = [6]

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	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
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ANSWERS TO JURY QUESTIONS

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NOTES:

SCORESHEET

stage: 2 | fight (round no.): 5 | room: B | problem no.: 2 | Juror's name: T. OPATRNÝ

reporter: HUNGARY | opponent: SWEDEN | reviewer: AUSTRALIA | signature:

REPORTER

Start from 1 and add/subtract

1 + 5 + 3 - [ ] = 9

REPORT

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NOTES:

OPPONENT

Start from 1 and add/subtract

1 + 0.5 + 2 + 1.5 - [ ] = 5

QUESTIONS ASKED

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- 1 — some relevant, aimed at resolving some unclear points
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NOTES:

SCORESHEET

stage: 3 | fight (round no.): 5 | room: B | problem no.: 15 | Juror's name: Feng Song

reporter: SWEDEN | opponent: AUSTRALIA | reviewer: HUNGARY | signature: Feng Song

REPORTER

Start from 1 and add/subtract

1 + [2.5] + [2.5] - [0] = [6]

REPORT

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NOTES:

OPPONENT

Start from 1 and add/subtract

1 + [1] + [2.2] + [2.0] - [5] = [6]

QUESTIONS ASKED

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NOTES:

REVIEWER

Start from 1 and add/subtract

1 + [2] + [2] + [2] - [0] = [7]

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NOTES:

SCORESHEET

stage: 11 | fight (round no.): 5 | room: B | problem no.: 15 | Juror's name: MATEJ BADIN

reporter: SWEDEN | opponent: AUSTRALIA | reviewer: HUNGARY | signature: [signature]

REPORTER

Start from 1 and add/subtract

1 + (2.5) + 2 - 0 = 6

REPORT

Physical view into the problem is missing from the experiments

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	2.5 some	[illegible]	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	[illegible]
3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution
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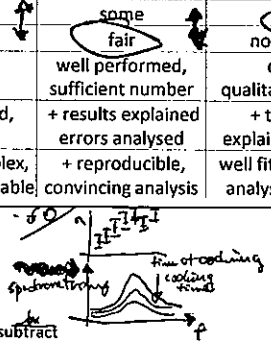
NOTES: METHOD 1,2 AMOUNT OF THE EGG CONTROL OF THE TEMPERATURE ~ 7.5 min half boiled egg

SENSITIVITY METHODS DEGREE OF BOILING

60



spectrometry

time of cooling

cooling time

TCA analysis of the theory

Interpolation curve order Q1

Estimated cooling time

accuracy

sensitivity

Equivalent calculated cooling time

How does the values of this curves go into the theory

Q2: Physical effect 4th order

Variation between the eggs Q3

Q4: what is the

OPPONENT

Start from 1 and add/subtract

1 + 1 + (1.5; 2) + 2 - 0 = 6

QUESTIONS ASKED

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ANSWERS TO JURY and REVIEWER'S QUESTIONS

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NOTES:
Q:
- boiling water
- nonspherical motion - wobbling
- average sensitivity → actual values

general comment

DISCUSSION:
- coagulation heat transfer in
- egg [illegible]
- viscosity increases specific values of temperature
- "more inertia" → in the egg
- Consideration of the eggs & white → why
- Defect to degree to which is cooling
- Force diagram 60

REVIEWER

Start from 1 and add/subtract

1 + 2 + 2 + 1.5 - 0 = 6

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NOTES:
Questions:
- cooling the eggs with water
- 2nd method
- How many eggs → sensitivity
- 1st method
- every eggs with the same

Questions
- mass 53-63 g
- light source [illegible]
- covers the whole frequency range

SCORESHEET

stage: 3 | fight (round no.): 5 | room: B | problem no.: 15 | Juror's name: Chew Lock Yue

reporter: Sweden | opponent: Australia | reviewer: Hungary | signature: C.L.Y.

REPORTER

Start from 1 and add/subtract

1 + [4] + [3] - [0] = [8]

REPORT

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1	only technical points cleared	some	avoided some questions
2	some scientific points cleared	many	cooperated well
3	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions
4	brought in new physics	proved deep understanding	efficient, productive

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

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

NOTES:

OPPONENT

Start from 1 and add/subtract

1 + [1] + [2] + [1] - [0] = [5]

QUESTIONS ASKED

- 0 almost no, irrelevant
- 1 some relevant, aimed at resolving some unclear points
- 2 short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no	almost nothing	no or irrelevant	almost no	no
1	very little	some main points	few	some	almost no
2	not all	main points	some	to important topics	some
3	almost all	all relevant points	many	to most topics	reasonable
4	all & efficiently	practically all points	practically all	+ improvement suggestions	very good

DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
0	almost no	irrelevant	very little	almost no	no
1	little	some	some	to some extent	almost no
2	partial	average	some correct	leading or cooperative	some
3	good	many	many correct	quite efficient	reasonable
4	new crucial point(s)	almost all	+ improvement suggestions	very 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] + [0.5] + [0.5] - [0] = [8]

QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 some relevant, sufficient number, could clear things out
- 2 most time used, many unclear points resolved, aimed at both rep. and opp.
- 3 +short, apt and clear, well prioritized time managed efficiently

REVIEW OF REPORT

	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	partial	too short/long	some	partially relevant	almost no
2	good	relevant parts	many	mostly adequate	some
3	detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good

REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	too short/long	too short/long	some	partially relevant	almost no
2	informative, apt	relevant parts	many	mostly adequate	some
3	brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good

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 (round no.): 5 | room: B | problem no.: 15 | Juror's name: MAMOIKA A.

reporter: Sweden | opponent: Australia | reviewer: Hungary | signature:

REPORTER

Start from 1 and add/subtract

1 + [4,5] + [1,5] - [0] = [7]

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	average
3	good (X)	good (X)	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average
5						
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

DISCUSSION WITH OPPONENT

	scientific contribution	relevant arguments/responses	efficiency
0	almost no	too few (X)	almost no, chaotic
1	only technical points cleared	some	avoided some questions (✓)
2	some scientific (X) points cleared	many	cooperated well
3	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions
4	brought in new physics	proved deep understanding	efficient, productive

ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS

- 0 (X) 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 ; 2,0] + [2,0] - [0] = [5]

QUESTIONS ASKED

- 0 almost no, irrelevant
- 1 (X) some relevant, aimed at resolving some unclear points
- 2 short allowing short answers, prioritized, all time used

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no	almost nothing	no or irrelevant	almost no	no (X)
1	very little	some main points (X)	few	some	almost no
2	not all	main points	some	to important topics	some
3	almost all (✓)	all relevant points	many	to most topics	reasonable
4	all & efficiently	practically all points	practically all	+ improvement suggestions	very good

DISCUSSION WITH REPORTER

	scientific contribution	relevance of topics	own opinions presented	efficiency	prioritisation
0	almost no	irrelevant	very little	almost no	no
1	little	some (X)	some	to some extent	almost no
2	partial	average	some correct	leading or cooperative	some
3	good (X)	many	many correct	quite efficient	reasonable
4	new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good

ANSWERS TO JURY and REVIEWER'S QUESTIONS

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

NOTES:

REVIEWER

Start from 1 and add/subtract

1 + [2] + [1,5] + [2] - [0] = [7]

QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 some relevant, sufficient number, could clear things out
- 2 (X) most time used, many unclear points resolved, aimed at both rep. and opp.
- 3 +short, apt and clear, well prioritized time managed efficiently

REVIEW OF REPORT

	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	partial (X)	too short/long	some	partially relevant (✓)	almost no
2	good	relevant parts	many	mostly adequate	some
3	detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good

REVIEW OF OPPOSITION

	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
0	poor	almost no	too few	irrelevant	no
1	too short/long (✓)	too short/long (✓)	some	partially relevant	almost no
2	informative, apt	relevant parts	many (X)	mostly adequate (✓)	some
3	brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate	good

ANSWERS TO JURY QUESTIONS

- 0 (X) 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 (round no.): 5 | room: B | problem no.: 15 | Juror's name: T. OPATRNÝ

reporter: SWEDEN | opponent: AUSTRALIA | reviewer: HUNGARY | signature: T. O.

REPORTER

Start from 1 and add/subtract

1 + [3] + [2] - [ ] = [6]

REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood
1	some	some	some	some	review of sources, cited	partly
2	fair	fair	fair	not well fitting	some own input	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution
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5						
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

DISCUSSION WITH OPPONENT

	scientific contribution	relevant arguments/responses	efficiency
0	almost no	too few	almost no, chaotic
1	only technical points cleared	some	avoided some questions
2	some scientific points cleared	many	cooperated well
3	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions
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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 + [0.8] + [1] + [1] - [ ] = [4]

QUESTIONS ASKED

0 almost no, irrelevant

1 some relevant, aimed at resolving some unclear points

2 short allowing short answers, prioritized, all time used

NOTES:

OPPOSITION (SPEECH)

	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no	almost nothing	no or irrelevant	almost no	no
1	very little	some main points	few	some	almost no
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DISCUSSION WITH REPORTER

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4	new crucial point(s)	almost all	+ improvement suggestions	very 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 + [2] + [1] + [1] - [ ] = [5]

QUESTIONS ASKED

0 too few, mostly irrelevant

1 some relevant, sufficient number, could clear things out

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	speech summary	discussion analysis	own opinions	pros & cons	prioritisation
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ANSWERS TO JURY QUESTIONS

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-1 some incorrect, inconclusive or too long

-2 deeply incorrect or show deep misconceptions

NOTES:

Round: 5 Room: B Fight Assistants: Coral Koh-Reuben, Le Quang Anh

	Stage 1			Stage 2			Stage 3			Stage 4		
Team	Australia	Hungary	Sweden	Hungary	Sweden	Australia	Sweden	Australian	Hungary			
Juror	Rep	Opp	Rev	Rep	Opp	Rev	Rep	Opp	Rev	Rep	Opp	Rev
Feng Song	5	6	6	5	6	6	6	6	7			
Matej Balin	5	6	6	8	6	7	6	6	6			
Crew Lock Yue	7	6	5	8	6	8	8	5	8			
Aliaksandr Mamoika	5	6	8	7	5	6	7	5	7			
Tomas Opatray	6	7	7	9	5	6	6	4	5			
Acting Team Member	Xuan-Nghi Pham	Balázs Norbert Nagy	William Kocalp	Tímea Bánóczki	Daniel Javadinejad	Thejeswaran Elankayer	Eric Bojs	Daniel Campbell	Balázs Norbert Nagy			
Rejected Problems	NIL			NIL			NIL					
Accepted Problem	9. Ball in a tube			2. Balloon airhorn			15. Boiled Egg					

Signature Fight Assistant:..... Double-checked with Scoring Guidelines by second Fight Assistant (signature): .....