

SCORESHEET

stage: 1 fight (round no.): 4 room: A problem no.: 11 Juror's name: Vent
 reporter: Brazi opponent: Chinese Taipei reviewer: Australia signature: [Signature]

REPORTER 3 Start from 1 and add/subtract
 $1 + \boxed{3} + \boxed{3\frac{1}{2}} - \boxed{1\frac{1}{2}} = \boxed{7}$

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH REPORTER	DISCUSSION WITH OPPONENT	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	scientific contribution	relevant arguments/responses	efficiency
1	some	some	some	some	review of sources, cited	partly	almost no	too few	almost no, chaotic
2	fair	fair	fair	not well fitting	some own input	average	only technical	some	avoided some questions
3	good	good	well performed	debatable	some interesting results	interesting	some scientific points cleared	many	cooperated well
4	detailed	quite detailed	sufficient number	qualitative analysis	considerable experimental or theoretical	some perspectives above average	interesting points	+ data/theory	answer correctly
5	demonstrative	correct	+ results explained	+ theoretical analysis	considerable experimental and theoretical	greater extent than expected	disputed	convincingly supported	to most questions - efficient, productive
6	deep and comprehensible, shows physical insight	detailed, complex, stable	errors analysed, reproducible, convincing analysis	explained, well fitting, deviations analysed, conclusive	considerable experimental and theoretical	some perspectives above average greater extent than expected	brought in new physics	provocative, deep understanding	deeply incorrect or show deep misconceptions

NOTES:

OPPONENT 3 Start from 1 and add/subtract
 $1 + \boxed{1\frac{1}{2}} + \boxed{2} + \boxed{0} - \boxed{0} = \boxed{7}$

(Sorry this is such a mess)

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	efficiency	prioritisation	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	almost no	almost nothing	no or irrelevant	almost no	no	scientific contribution, of topics	almost no	no	concise and correct or no questions asked
1	some unclear points	very little	some main points	few	almost no	little	some	almost no	some incorrect, inconclusive or too long
2	short, many short answers, prioritized; all time used	not all	main points	some	some	partial	average	some	deeply incorrect or show deep misconceptions
		almost all	all relevant points	to most topics	reasonable	new crucial point(s)	many	quite efficient	
		efficiently	practically all points	+ improvement suggestions	very good	almost all	+ improvement suggestions	very efficient	

NOTES:

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

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	pros & cons	prioritisation	ANSWERS TO JURY QUESTIONS
0	too few, mostly irrelevant	poor	too few	irrelevant	no	speech summary	irrelevant	no	concise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	partial	some	partially relevant	almost no	poor	partially relevant	almost no	some incorrect, inconclusive or too long
2	most time used, many unclear points	partial	many	mostly adequate	almost no	too short/long	mostly adequate	almost no	deeply incorrect or show deep misconceptions
3	resolved, aimed at both rep. and opp. +short, apt and clear, well prioritized time managed efficiently	detailed, complex	+ improvement suggestions	adequate	good	too short/long	adequate	good	

NOTES:

SCORESHEET

stages: 1 fight (round no.): 4 room: A problem no.: 11 Juror's name: Lyndell Edder
 reporter: BRAZIL opponent: CHINESE reviewer: AUSTRALIA signature: [Signature]

REPORTER Start from 1 and add/subtract

1 + 2 + 1 - 0 = 4

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH OPONENT	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS	
0	almost no	almost no	too few	no, almost no	others' data, incorrectly cited	misunderstood	scientific contribution almost no	relevant arguments/responses: some	efficiency almost no, chaotic
1	some	some	some	some	review of sources, cited	partly	only technical points cleared	some	avoided some questions
2	fair	fair	fair	some deviations	some own input	average	some scientific points cleared	many	cooperated well
3	good	good	well performed, sufficient number of results explained + reproducible, convincing analysis	qualitatively analysed + theory limits explained, conclusive well fitting, deviations analysed, conclusive	considerable experimental or theoretical and theoretical	interesting solution	interesting points: discussed brought in new physics	+ data/theory convincingly supported, proved deep understanding	answered directly to most questions efficient, productive
4	detailed demonstrative	quite detailed, correct							
5	deep and comprehensive, shows physical insight	completely testable							
6									

NOTES:

OPPONENT

Start from 1 and add/subtract

1 + 2 + 1.5 + 1.5 - 0 = 6

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	efficiency	prioritisation	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	almost no	almost nothing	no or irrelevant	almost no	no	scientific contribution almost no	almost no	no	concise and correct or no questions asked
1	some unclear points	very little	few	some	some	little	irrelevant	no	some incorrect, inconclusive or too long
2	short allowing short answers, prioritized, all time used	not all	some	to important topics	reasonable	partial	average	same	deeply incorrect or show deep misconceptions
3		almost all	many	to most topics + improvement suggestions	reasonable	good	many	reasonable	
4		all & efficiently	practically all	practically all	very good	new crucial point(s)	almost all	very good	

NOTES:

REVIEWER

Start from 1 and add/subtract

1 + 2 + 1.5 + 1.5 - 0 = 6

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	own opinions	pros & cons	prioritisation	ANSWERS TO JURY QUESTIONS
0	too few, mostly irrelevant	poor	too few	irrelevant	no	speech summary poor	too few	irrelevant	no	concise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	partial	some	partially relevant	no	too short/long	some	partially relevant	no	some incorrect, inconclusive or too long
2	most time used, many unclear points resolved, aimed at both rep. and opp.	good	many	mostly adequate	some	informative, add relevant parts	many	mostly adequate	some	deeply incorrect or show deep misconceptions
3	+short, apt and clear, well prioritized time managed efficiently	detailed, complex	+ improvement suggestions	adequate	good	brief but accurate	+ improvement suggestions	adequate	good	

NOTES:

SCORESHEET

REPORTER: 3 + 2 - 0 = 6
 Start from 1 and add/subtract

stage: 1 fight (round no.): 4
 reporter: Brazil opponent: U. Taylor

room: A problem no.: 11
 reviewer: Australia

Juror's name: ZNKA
 signature: [Signature]

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH OPPONENT	DISCUSSION WITH REPORTER	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS	
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	scientific contribution almost no	relevance of topics irrelevant	relevant arguments/responses too few	efficiency almost no, chaotic
1	some	some	some	some	review of sources, cited	partly	only technical points cleared	some scientific points cleared	some	avoided some questions
2	fair	fair	fair	not well fitting deviations	some own input	average	some scientific points cleared	some correct	many	cooperated well
3	good	good	well performed, sufficient number	qualitatively analysed	some interesting results	interesting solution	interesting points discussed	some correct	many	answered directly to most questions
4	detailed	quite detailed, correct	+ results explained	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	interesting points discussed brought in new physics	many	many correct	convincingly supported
5	demonstrative	correct	errors analysed	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	interesting points discussed brought in new physics	many	many correct	convincingly supported
6	deep and comprehensive, shows physical insight	detailed, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	interesting points discussed brought in new physics	many	many correct	convincingly supported

NOTES:

OPPONENT: 15 + 2 + 15 - 0 = 6
 Start from 1 and add/subtract

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	efficiency	prioritisation	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	almost no	almost nothing	no or irrelevant	almost no	no	scientific contribution almost no	almost no	no	conclude and correct or no questions asked
1	some unclear points	very little	few	some	some	little	some	some	some incorrect, inconclusive or too long
2	short allowing short answers, prioritized, all time used	main points	many	to important topics	reasonable	partial	many	some	deeply incorrect or show deep misconceptions
3		all & efficiently	practically all points	+ improvement suggestions	very good	good	many	responsible	
4		practically all points	practically all	+ improvement suggestions	very good	new crucial point(s)	almost all	very efficient	

NOTES:

REVIEWER: 2 + 2 + 2 - 0 = 7
 Start from 1 and add/subtract

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	efficiency	prioritisation	ANSWERS TO JURY QUESTIONS
0	too few, mostly irrelevant	poor	too few	irrelevant	no	speech summary poor	almost no	no	conclude and correct or no questions asked
1	some relevant, sufficient number, could clear things out	partial	some	partially relevant	some	too short/long	some	some	some incorrect, inconclusive or too long
2	most time used, many unclear points resolved, aimed at both rep. and opp.	good	many	mostly adequate	some	too short/long	many	some	deeply incorrect or show deep misconceptions
3	short, apt and clear, well prioritized	good	many	mostly adequate	some	too short/long	many	some	
3	time managed efficiently	detailed, complex	+ improvement suggestions	adequate	good	brief but accurate	conclusive	adequate	

NOTES:

SCORESHEET

stage: 1 fight (round no.): 4 room: A problem no.: 11 Juror's name: V. Velupillai
 reporter: Vidya Tamara opponent: An-Jung Hwang reviewer: Daniel Campbell signature: BC

REPORTER Start from 1 and add/subtract

1 + 3 + 3 - -1 = 6

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH OPONENT	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	scientific contribution almost no	relevant arguments/responses almost no, chaotic questions answered directly to most questions efficient, productive
1	some	some	some	some	review of sources, cited	partly	only technical points cleared	avoided some questions cooperated well
2	fair	fair	fair	not well fitting	some own input	average	some scientific points cleared	cooperated well
3	good	good	well performed, sufficient number	qualitatively analysed	some interesting results	interesting solution	interesting points discussed brought in new physics	answered directly to most questions efficient, productive
4	detailed	quite detailed,	+ results explained	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	+ data/theory convincingly supported; proved deep understanding	answered directly to most questions efficient, productive
5	demonstrative	correct	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected		
6	deep and comprehensible, shows physical insight	detailed, complex, completely testable						

NOTES:

OPPONENT

Start from 1 and add/subtract

1 + 0 + 3 + 2 - 1 = 5

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	almost no	almost nothing	no or irrelevant	almost no	no	scientific contribution almost no	concise and correct or no questions asked
1	some relevant, aimed at resolving some unclear points	very little	few	some	some	little	some incorrect, inconclusive or too long
2	short allowing short answers, prioritized, all time used	not all	many	to important topics	reasonable	partial	deeply incorrect or show deep misconceptions
3		almost all	all relevant points	to most topics	reasonable	good	
4		all & efficiently	practically all points	+ improvement suggestions	very good	new crucial point(s)	

NOTES:

REVIEWER

Start from 1 and add/subtract

1 + 1 + 2 + 2 - 0 = 6

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	ANSWERS TO JURY QUESTIONS
0	too few, mostly irrelevant	poor	too few	irrelevant	no	speech summary poor	concise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	partial	some	partially relevant	almost no	too short/long	some incorrect, inconclusive or too long
2	most time used, many unclear points resolved, aimed at both rep. and opp.	too short/long	many	mostly adequate	some	informative, apt	deeply incorrect or show deep misconceptions
3	+short, apt and clear, well prioritized	good	improvement suggestions	fully adequate	good	brief but accurate	

NOTES:

SCORESHEET

REPORTER: **4** + **1.5** - **0.5** = **5** (6) *not to be used*

REPORTER: **1** stage: **1** fight (round no.): **4** room: **A** problem no.: **11** Juror's name: **T.S. RSR**

REPORTER: **Braz-17** opponent: **Chaper: Chaper** reviewer: **Australia** signature: *[Signature]*

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH OPPONENT	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS	
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	scientific contribution almost no	relevant arguments/responses too few	efficiency almost no, chaotic avoided some questions
1	some	some	some	some	review of sources, cited	partly	only technical points cleared	some	cooperated well
2	fair	fair	fair	not well fitting	some own input	average	interesting points cleared	many	
3	good	good	well performed	deviations qualitatively analysed	some interesting results	interesting solution	discussed brought in new physics		
4	detailed	quite detailed	+ results explained	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	+ data/theory convincingly supported	answered directly to most questions	
5	demonstrative	correct	errors analysed	well fitting, deviations analysed	considerable experimental and theoretical	greater extent than expected			
6	deep and comprehensible, shows physical insight	detailed, complex, completely testable	convincing analysis						

NOTES: How is hair wound around & connected to shaped paper? How to make hair float; w/ effect? Only hair spin? Free law of diffraction → Bragg's law as function of Bragg's P.S. Control of temp & humidity

OPONENT: Start from 1 and add/subtract: $1 + 1.5 + 2.8 + 1.5 = 6.3$

ANSWERS TO JURY, REVIEWER'S QUESTIONS: concise and correct or no questions asked

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	almost no	almost no	no or irrelevant	almost no	no	scientific contribution almost no	concise and correct or no questions asked
1	some unclear points	very little	few	some	some	little	some incorrect, inconclusive or too long
2	short allowing short answers, prioritized, all time used	not all	main points	to important topics	responsible	partial	deeply incorrect or show deep misconceptions
		almost all	all relevant points	many	to most topics + improvement suggestions	good	
		efficiently	practically all points	practically all	very good	new crucial point(s)	

NOTES: Too much emphasis on calc/prog. Discussed some details. PH's delay - irrelevant. Slide 30 time: response time is creep. & by statistics control of car. Added some pts on exp calibrations, repeatability, statistics inno.

REVIEWER: Start from 1 and add/subtract: $1 + 2.5 + 1.5 + 1.8 = 7.3$

ANSWERS TO JURY, REVIEWER'S QUESTIONS: concise and correct or no questions asked

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	ANSWERS TO JURY QUESTIONS
0	too few, mostly irrelevant	poor	too few	irrelevant	no	speech summary poor	concise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	almost no	some	partially relevant	almost no	discussion analysis almost no	some incorrect, inconclusive or too long
2	most time used, many unclear points resolved, aimed at both rep. and opp.	too short/long	many	mostly adequate	some	too short/long	deeply incorrect or show deep misconceptions
3	short, apt and clear, well prioritized time managed efficiently	good	+ improvement suggestions	adequate	good	informative, apt	
		detailed, complex				brief but accurate	

NOTES: Good pts that were missed by Opponent. Good summary & own scientific value add in the statistical analysis & control of parameters. Too much emphasis on ratio/protein structure not on amino acid residues relevant.

SCORESHEET

stage: 2 fight (round no.): 4 room: A problem no.: 12 Juror's name: T-S-1col
 reporter: Cheng opponent: Andalicia reviewer: Brazeil signature: [Signature]

REPORTER	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH OPONENT	ANSWERS TO JURY, OPONENT and REVIEWER'S QUESTIONS
1 <u>1.5</u> + <u>1.5</u> - <u>0</u> = <u>5</u>	almost no	almost no	some	some	others' data, incorrectly cited	misunderstood	scientific contribution	concise and correct or no questions asked
2 <u>1</u>	some	some	fair	well performed, sufficient number of errors analysed, + reproducible, convincing analysis	review of sources, cited	average	almost no	no questions asked
3 <u>1</u>	good	good	good	+ results expected	some own input	interesting	some technical points cleared	some incorrect,
4 <u>1</u>	detailed	quite detailed	correct	well fitting explanations	some interesting results	solution	some scientific points cleared	inconclusive or too long
5 <u>1</u>	demonstrative	correct	correct	well fitting explanations	some aspects above average	greater extent than expected	interesting points discussed	deeply incorrect or show deep misconceptions
6 <u>1</u>	deep and comprehensive, shows physical insight	completely testable	completely testable	convincing analysis	greater extent than expected	greater extent than expected	convincingly supported	

NOTES:

Good theoretical expl → need to see link to measurement of parameters, sound → 2p. don't mention random? Gen? vs dependence

OPONENT	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	ANSWERS TO JURY and REVIEWER'S QUESTIONS
1 <u>1.8</u> + <u>2</u> + <u>1.2</u> = <u>5</u>	almost no	almost no	no or irrelevant	almost no	no	little	concise and correct or no questions asked
2 <u>1</u>	some unclear points	very little	few	some	almost no	partial	some incorrect,
3 <u>1</u>	short allowing short answers, prioritized, all time used	almost all	many	to most topics	reasonable	good	inconclusive or too long
4 <u>1</u>		practically all points	practically all	+ improvement suggestions	very good	new crucial point(s)	deeply incorrect or show deep misconceptions

NOTES:

Difficultly understanding each other's' questions? → more familiar with lab frame while rep need rotating frame; no commensality & language

REVIEWER	QUESTIONS ASKED	REVIEW OF REPORT	REVIEW OF OPPOSITION	ANSWERS TO JURY QUESTIONS
1 <u>1.8</u> + <u>2</u> + <u>2</u> = <u>5.8</u>	too few, mostly irrelevant	report summary & understanding	speech summary	concise and correct or no questions asked
2 <u>1</u>	some relevant, sufficient number, could clear things out	poor	poor	no questions asked
3 <u>1</u>	most time used, many unclear points resolved, aimed at both rep. and opp.	partial	too short/long	some incorrect,
4 <u>1</u>	+short, apt and clear, well prioritized	good	too short/long	inconclusive or too long
5 <u>1</u>		detailed, complex	brief but accurate	deeply incorrect or show deep misconceptions

NOTES:

Good evaluation

SCORESHEET

REPORTER: **3** + **2** - **0** = **6**
 Start from 1 and add/subtract

stage: **2** fight (round no.): **4**
 reporter: *Ch Tampi* opponent: *Australia*

room: **A** reviewer: *Brigid*

problem no.: **12** Juror's name: *INICKA*
 signature: *[Signature]*

REPORT		DISCUSSION WITH OPONENT		DISCUSSION WITH REPORTER		ANSWERS TO JURY, OPONENT and REVIEWER'S QUESTIONS			
0	phenomenon explanation almost no	theory/model almost no	relevant experiments too few	comparison between theory and experiment no/ almost no	own contribution others' data, incorrectly cited	task fulfillment misunderstand	scientific contribution almost no	relevant arguments/responses too few	efficiency almost no, chaotic
1	some	some	some	some	review of sources, cited	partly	only technical points cleared	some	avoided some questions
2	fair	fair	fair	not well fitting	some own input	average	some scientific points cleared	many	cooperated well
3	good	good	well performed, sufficient number	qualitatively analysed	considerable experimental or theoretical	interesting solution	interesting points discussed	+ data/theory convincingly supported	answered effectively to most questions
4	detailed	quite detailed, correct	+ results explained + reproducible, convincing analysis	+ theory limits explained, deviations analysed, conclusive	considerable experimental or theoretical	some aspects above average greater extent than expected	discussed brought in new physics	proved deep understanding	efficiently, productive
5	demonstrative	deep and comprehensible, detailed, complex, completely testable							
6	shows physical insight								

NOTES:

OPONENT Start from 1 and add/subtract
 1 + **15** + **2** + **2** - **0** = **6**

QUESTIONS ASKED		OPPOSITION (SPEECH)		DISCUSSION WITH REPORTER		ANSWERS TO JURY and REVIEWER'S QUESTIONS		
0	almost no, irrelevant	time used almost no	understanding of presentation almost nothing	scientific contribution almost no	relevance of topics irrelevant	own opinions very little	efficiency almost no	prioritisation no
1	some relevant, aimed at resolving some unclear points	very little	not all major points	little	some	some	to some extent leading or cooperative	almost no
2	short allowing short answers, prioritized, all time used	not all	all relevant points	partial	adequate	some correct	quite efficient	some
		almost all	practically all points	good	many	many correct	very efficient	reasonable
		all & efficiently	practically all points	new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good

NOTES:

REVIEWER Start from 1 and add/subtract
 1 + **2** + **2** + **15** - **0** = **6**

QUESTIONS ASKED		REVIEW OF REPORT		REVIEW OF OPPOSITION		ANSWERS TO JURY QUESTIONS		
0	too few, mostly irrelevant	report summary & understanding poor	discussion analysis almost no	speech summary poor	discussion analysis almost no	own opinions too few	irrelevant	conise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	partial	too short/long	too short/long	too short/long	some	partially relevant	some incorrect,
2	most time used, many unclear points resolved, aimed at both rep. and opp.	good	relevant parts	brief but accurate	accurate, conclusive	+ improvement suggestions	mostly adequate	inconclusive or too long
3	short, apt and clear, well prioritized time managed efficiently	detailed, complex	accurate, conclusive	accurate	conclusive	many	fully adequate	deeply incorrect or show deep misconceptions

NOTES:

SCORESHEET

stage: 2 fight (round no.): 4 room: A problem no.: 12 Juror's name: L. Stedman
 reporter: CHIN/SET opponent: AUSTRALIA reviewer: BRAZIL signature: L. Stedman

REPORTER Start from 1 and add/subtract
 1 + 20 + 25 - 0 = 6

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH OPPONENT	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS	
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	scientific contribution almost no	relevant arguments/responses too few	efficiency almost no, chaotic
1	some	some	fair	some	review of sources, cited	partly	only technical points cleared	some	avoided some questions
2	fair	fair	well performed, sufficient number	not well fitting deviations	some interesting results	average	some scientific points cleared	many	cooperated well
3	good	good	+ results explained	qualitatively analysed	considerable experimental	interesting solution	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions
4	detailed demonstrative	quite detailed, correct	+ reproducible, convincing analysis	+ theory limits explained, conclusive	considerable experimental and theoretical	some aspects above average	brought in new physics	proven deep understanding	efficient, productive
5	deep and comprehensive	detailed, complex, completely testable		well fitting, deviations analysed, conclusive	and theoretical	greater extent than expected			
6	shows physical insight								

NOTES:

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 + 2 + 2 + 1 - 0 = 6

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	efficiency	prioritisation	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0 almost no, irrelevant	almost no	almost nothing	no or irrelevant	almost no	no	scientific contribution almost no	almost no	no	concise and correct or no questions asked
1 some relevant, aimed at resolving some unclear points	very little	some main points	few	some	almost no	little	some	almost no	some incorrect, inconclusive or too long
2 short allowing short answers, prioritized, all time used	not all	main points	many	to important topics	some	partial	to some extent	some	deeply incorrect or show deep misconceptions
3	almost all	all relevant points	practically all	+ improvement suggestions	reasonable	good	leading or cooperative	reasonable	
4	efficiently	practically all points	practically all		very good	new crucial point(s)	quite efficient	very good	

NOTES:

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 + 2 + 2 - 0 = 7

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	own opinions	pros & cons	prioritisation	ANSWERS TO JURY QUESTIONS
0 too few, mostly irrelevant	poor	almost no	too few	irrelevant	no	speech summary poor	too few	irrelevant	no	concise and correct or no questions asked
1 clear things out	partial	too short/long	some	partially relevant	almost no	too short/long	some	partially relevant	almost no	some incorrect, inconclusive or too long
2 most time used, many unclear points resolved, aimed at both rep. and opp.	good	relevant parts	many	mostly adequate	almost no	informative, apt	many	mostly adequate	some	deeply incorrect or show deep misconceptions
3 short, apt and clear, well prioritized time managed efficiently	detailed, complex	accurate, conclusive	+ improvement suggestions	adequate	good	brief but accurate	+ improvement suggestions	adequate	good	

NOTES:

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

SCORESHEET

REPORTER: **2** + **2 1/2** - **0** = **5**

stage: **2** fight (round no.): **4**
 reporter: **Chinese Taipei** opponent: **Australia**

room: **A** problem no.: **12**
 reviewer: **Bazil**

Juror's name: **Vent Hogan**
 signature: *[Signature]*

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH OPONENT	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS
0	phenomenon almost no	theory/model almost no	relevant experiments too few	comparison between theory and experiment no/almost no	own contribution others' data, incorrectly cited	task fulfillment misunderstanding	DISCUSSION WITH OPONENT scientific contribution almost no	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS concise and correct or no questions asked
1	some	some	some	some	review of sources, cited	partly average	scientific contribution only technical	some incorrect, inconclusive or too long
2	fair	fair	well performed, sufficient number	not well fitting details analysed	some own input	average interesting solution	points cleared some scientific points shared	deeply incorrect or show deep misconceptions
3	good	good	+ results explained	+ theory limits explained, conclusive	some interesting results	some aspects above average	interesting points discussed	
4	detailed	quite detailed, correct	errors analysed, + reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental or theoretical	greater extent than expected	+ data/theory convincingly supported, proved deep understanding	
5	deep and comprehensive, shows physical insight	detailed, complex, completely testable						
6								

NOTES:

OPPONENT Start from 1 and add/subtract
 1 + **1** + **2** + **2** - **0** = **6**

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	efficiency	prioritisation	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	almost no, irrelevant	almost no	almost nothing	almost no	no	scientific contribution of topics little	almost no	no	concise and correct or no questions asked
1	some relevant, aimed at resolving some unclear points	very little	some main points	some	some	little partial average many	to some extent	some incorrect, inconclusive or too long	
2	short allowing short answers, prioritised, all time used	all & efficiently	all relevant points	to most topics + improvement suggestions	reasonable	new crucial point(s)	very efficient	reasonable	deeply incorrect or show deep misconceptions

NOTES:

REVIEWER Start from 1 and add/subtract
 1 + **2** + **2** + **2** - **0** = **7**

QUESTIONS ASKED	REPORT SUMMARY & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	own opinions	pros & cons	prioritisation	ANSWERS TO JURY QUESTIONS
0	too few, mostly irrelevant	poor	irrelevant	irrelevant	no	speech summary poor	too few	irrelevant	no	concise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	partial	some	partially relevant	almost no	discussion analysis almost no	some	partially relevant	almost no	some incorrect, inconclusive or too long
2	most time used, partly unclear points resolved, aimed at both rep. and opp.	good	many	mostly adequate	some	too short/long informative, apt relevant parts	many	mostly adequate	some	deeply incorrect or show deep misconceptions
3	short, apt and clear, well prioritized time managed efficiently	detailed, complex	improvement suggestions	adequate	good	brief but accurate	improvement suggestions	fully adequate	good	

NOTES:

SCORESHEET

stage: 2 fight (round no.): IV room: A problem no.: 12 Juror's name: V. Debes
 reporter: AN - Jung Wang opponent: Daniel Law reviewer: Robertto Galfo signature: [Signature]

REPORTER Start from 1 and add/subtract

1 + 3 + 4 - 0 = 8

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	DISCUSSION WITH OPPONENT	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS	
0	almost no	almost no	too few	no, almost no	others' data, incorrectly cited	misunderstood	scientific contribution almost no	relevant arguments/responses: too few	efficiency almost no, chaotic
1	some	some	some	some	review of sources, cited	partly	only technical points cleared	some	avoided some questions
2	fair	fair	fair	not well fitting	some own input	average	some scientific points cleared	many	cooperated well
3	good	good	well performed, sufficient number	qualitatively analysed	some interesting results	interesting solution	interesting points discussed	+ data/theory convincingly supported	answered directly to most questions
4	detailed	quite detailed,	+ results explained	+ theory limits	considerable experimental or theoretical	some aspects above average	interesting points discussed brought in new physics	convincingly supported	answered directly to most questions
5	demonstrative	correct	errors analysed	explained, conclusive	considerable experimental and theoretical	greater extent than expected	discussed physics	proven deep understanding	efficient, productive
6	deep and comprehensive, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	practically all	very good	almost all	very efficient	very good

NOTES:

OPPONENT Start from 1 and add/subtract

1 + 1 + 2 + 3 - 0 = 6

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	efficiency	prioritisation	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	almost no	almost nothing	no or irrelevant	almost no	no	scientific contribution almost no	almost no	no	concise and correct or no questions asked
1	some relevant, aimed at resolving some unclear points	very little	few	some	some	little	irrelevant	almost no	some incorrect,
2	short allowing short answers, prioritized, all time used	not all	some	to important topics	reasonable	partial	average	leading or cooperative	inconclusive or too long
		almost all	many	to most topics	reasonable	good	many	quite efficient	deeply incorrect or show deep misconceptions
		all & efficiently	practically all points	+ improvement suggestions	very good	new crucial point(s)	almost all	very efficient	

NOTES:

REVIEWER Start from 1 and add/subtract

1 + 2 + 2 + 2 - 0 = 6

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	efficiency	prioritisation	ANSWERS TO JURY QUESTIONS
0	too few, mostly irrelevant	poor	too few	irrelevant	no	speech summary poor	almost no	no	concise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	partial	some	partially relevant	almost no	too short/long	almost no	irrelevant	some incorrect,
2	most time used, many unclear points resolved, aimed at both rep. and opp.	good	many	mostly adequate	some	informative, apt	relevant parts	partially relevant	inconclusive or too long
3	short, apt and clear, well prioritized time managed efficiently	detailed, complex	many	fully adequate	some	brief but accurate	accurate, conclusive	fully adequate	deeply incorrect or show deep misconceptions

NOTES:

SCORESHEET

REPORTER

1 + 2 + 2 - 1 = 4

stage: fight (round no.):

reporter: Thagan

room: A

problem no.:

Juror's name: V. Kobayashi
signature: *Gabriel*

opponent: Vitou Tams (reviewer: Xu-Hsi Wang)

REPORT		DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS							
0	phenomenon explanation almost no	theory/model almost no	relevant experiments too few	comparison between theory and experiment no/ almost no	own contribution others' data, incorrectly cited	task fulfillment misunderstood	scientific contribution almost no	relevant arguments/responses too few	efficiency almost no, chaotic	0	concise and correct or no questions asked
1	some	some	some	some	review of sources, cited	partly	only technical	some	avoided some questions	1	some incorrect,
2	fair	fair	fair	not well fitting	some own input	average	points cleared	many	cooperated well	2	inconclusive or too long
3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	interesting solution	points cleared	+ data/theory	answered directly to most questions	3	deeply incorrect or show deep misconceptions
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	interesting points discussed	convincingly supported	efficient, productive	4	
5	deep and comprehensive, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	brought in new physics	proved deep understanding			

NOTES:

OPPONENT

Start from 1 and add/subtract

1 + 1 + 2 + 2 - 0 = 6

QUESTIONS ASKED		DISCUSSION WITH REPORTER		ANSWERS TO JURY and REVIEWER'S QUESTIONS				
0	almost no, irrelevant	scientific contribution almost no	relevance of topics irrelevant	own opinions presented very little	efficiency almost no	prioritisation no	0	concise and correct or no questions asked
1	some relevant, aimed at resolving some unclear points	little	some	some	to some extent	almost no	1	some incorrect,
2	short allowing short answers, prioritized, all time used	partial	average	some correct	leading or cooperative	some	2	inconclusive or too long
3		good	many	many correct	quite efficient	reasonable	3	deeply incorrect or show deep misconceptions
4		new crucial point(s)	almost all	+ improvement suggestions	very efficient	very good	4	

NOTES:

REVIEWER

Start from 1 and add/subtract

1 + 1 + 2 + 2 - 0 = 6

QUESTIONS ASKED		DISCUSSION WITH OPPONENT		ANSWERS TO JURY and REVIEWER'S QUESTIONS				
0	too few, mostly irrelevant	scientific contribution almost no	relevance of topics irrelevant	own opinions presented very little	efficiency almost no	prioritisation no	0	concise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	some	some	some	to some extent	almost no	1	some incorrect,
2	most time used, many unclear points resolved, aimed at both rep. and opp.	partial	average	some correct	leading or cooperative	some	2	inconclusive or too long
3	-short, apt and clear, well prioritized time managed efficiently	good	many	many correct	quite efficient	reasonable	3	deeply incorrect or show deep misconceptions
4		detailed, complex	almost all	+ improvement suggestions	very efficient	very good	4	

NOTES:

SCORESHEET

Juror's name: IN Chan
signature: [Signature]

room: A problem no.: 17
reviewer: Ch Taipei

fight (round no.): 4
opponent: Brazil

stage: 3
reporter: Australia

REPORTER
1 + 1 + 2 - 0 = 4
Start from 1 and add/subtract

REPORT		phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment
0	almost no	almost no	almost no	no/ almost no	others' data, incorrectly cited	misunderstood	efficiency
1	some	some	some	not well fitting	review of sources, cited	partly average	almost no, chaotic avoided some questions cooperated well
2	fair	fair	fair	deviations	some own input	interesting solution	answered directly to most questions efficient, productive
3	good	good	good	qualitatively analysed	some interesting results		
4	detailed	quite detailed, correct	well performed, sufficient number	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	
5	demonstrative	detailed, complex, correct	+ results explained errors analysed	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	
6	deep and comprehensive, shows physical insight	completely testable	+ reproducible, convincing analysis				

NOTES:

OPPONENT
1 + 1 + 2 + 1 - 0 = 5
Start from 1 and add/subtract

QUESTIONS ASKED		time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation
0	almost no, irrelevant	almost no	almost nothing	no or irrelevant	almost no	no
1	some relevant, aimed at resolving some unclear points	very little	some main points	few	some	almost no
2	short allowing short answers, prioritized, all time used	no/ all	main points	some	to important topics	some
3		almost all	all relevant points	many	to most topics	reasonable
4		efficiently	practically all points	practically all	+ improvement suggestions	very good

NOTES:

REVIEWER
1 + 1.5 + 2 + 1.5 - 0 = 6
Start from 1 and add/subtract

QUESTIONS ASKED		report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation
0	too few, mostly irrelevant	poor	almost no	too few	irrelevant	no
1	some relevant, sufficient number, could clear things out	partial	too short/long	some	partially relevant	almost no
2	most time used, many unclear points resolved, aimed at both rep. and opp.	good	relevant parts	many	mostly adequate	some
3	+short, apt and clear, well prioritized time managed efficiently	detailed, complex	accurate, conclusive	+ improvement suggestions	fully adequate	good

NOTES:

DISCUSSION WITH OPPONENT

scientific contribution: almost no
only technical points cleared
some scientific points cleared
interesting points: discussed
brought in new physics

relevant arguments/responses: too few
some
max

efficiency: almost no, chaotic avoided some questions cooperated well
answered directly to most questions
efficient, productive

ANSWERS TO JURY and 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

DISCUSSION WITH REPORTER

scientific contribution: almost no
little
some
good
new crucial point(s)

relevance of topics: irrelevant
average
many

own opinions presented: very little
some
some correct
many correct
+ improvement suggestions

efficiency: almost no
to some extent
leading or cooperative
quite efficient
very efficient

prioritisation: no
almost no
some
reasonable
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
-2 deeply incorrect or show deep misconceptions

REVIEW OF OPPOSITION

speech summary: poor
too short/long
informative, apt
brief but accurate

discussion analysis: almost no
too short/long
relevant parts
accurate, conclusive

own opinions: too few
some
many
+ improvement suggestions

pros & cons: irrelevant
partially relevant
mostly adequate
fully adequate

prioritisation: no
almost no
some
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

SCORESHEET
 stage: 3
 reporter: AUSTRALIA opponent: BRAZIL
 room: A
 fight (round no.): 4
 problem no.: 17
 Juror's name: L Goodwin
 signature: Lta

REPORTER
 Start from 1 and add/subtract
 1 + 2 + 1 - 0 = 4

REPORT		DISCUSSION WITH OPPONENT		DISCUSSION WITH REPORTER		ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS	
0	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfillment	scientific contribution
1	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	almost no
2	some	some	some	some	review of sources, cited	partly	only technical
3	fair	fair	fair	not well fitting	some own input	average	points cleared
4	good	good	well performed, sufficient number	deviations	some interesting results	interesting solution	points cleared
5	detailed demonstrative	quite detailed, correct	+ results explained	qualitatively analysed	considerable experimental or theoretical	some aspects above average	interesting points discussed
6	deep and comprehensive, shows physical insight	deep and comprehensive, completely testable	+ errors analysed	+ theory limits explained, deviations well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	brought in new physics

NOTES:

OPPONENT
 Start from 1 and add/subtract
 1 + 1.5 + 2.5 + 3 - 0 = 8

QUESTIONS ASKED		OPPOSITION (SPEECH)		DISCUSSION WITH REPORTER		ANSWERS TO JURY and REVIEWER'S QUESTIONS	
0	almost no, irrelevant	time used	understanding of presentation	correct own opinions expressed	scientific contribution	relevance of topics	own opinions presented
1	some relevant, aimed at resolving some unclear points	almost no	almost nothing	almost no	almost no	irrelevant	very little
2	short allowing short answers, prioritized, all time used	very little	some main points	some	little	some	some
3		not all	main points	to important topics	partial	average	to some extent
4		almost all	all relevant points	to most topics	good	many	leading or cooperative
		all & efficiently	practically all points	+ improvement suggestions	new crucial point(s)	informative, accurate	quite efficient
						brief but accurate	very efficient

NOTES:

REVIEWER
 Start from 1 and add/subtract
 1 + 2 + 20 + 2 - 0 = 7

QUESTIONS ASKED		REVIEW OF REPORT		REVIEW OF OPPOSITION		ANSWERS TO JURY QUESTIONS	
0	too few, mostly irrelevant	report summary & understanding	discussion analysis	speech summary	discussion analysis	own opinions	pros & cons
1	some relevant, sufficient number, could clear things out	poor	almost no	poor	almost no	too few	irrelevant
2	most time used, many unclear points resolved, aimed at both rep. and opp.	partial	too short/long	too short/long	too short/long	some	partially relevant
3	+short, apt and clear, well prioritized time managed efficiently	good	relevant parts	informative, accurate	informative, accurate	many	mostly adequate
		detailed, complex	accurate, conclusive	brief but accurate	accurate, conclusive	+ improvement suggestions	fully adequate
							good

NOTES:

SCORESHEET

REPORTER: 3 stage: 3 fight (round no.): 4 room: A problem no.: 17 Juror's name: T.S. Koh
 reporter: Australia opponent: Brazil reviewer: Tarwan signature: [Signature]

REPORT		DISCUSSION WITH OPPONENT		DISCUSSION WITH REPORTER		ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS		
0	phenomenon explanation almost no	theory/model almost no	relevant experiments too few	comparison between theory and experiment no/ almost no	own contribution others' data, incorrectly cited	scientific contribution almost no	relevant arguments/responses too few	efficiency almost no, chaotic
1	some	some	some	some	review of sources, cited	only technical points cleared	some	avoided some questions
2	fair	fair	fair	not well fitting	some own input	interesting points	many	cooperated well
3	good	good	well performed, sufficient number	deviations qualitatively analysed	some interesting results	discussed		answered directly to most questions
4	detailed	quite detailed, correct	+ results explained	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting points brought in new physics		efficient, productive
5	demonstrative	deep and comprehensible, shows physical insight	errors analysed	well fitting, deviations analysed, conclusive	considerable experimental and theoretical			
6			convincing analysis					

NOTES:

Diffusion eqn. - How fast does pressure equalize?
 Did not address muzzle velocity vs air velocity drag, how poor understanding of the seal was broken; bounciness of ball.

Take - Maximize muzzle velocity

OPPONENT

Start from 1 and add/subtract
 1 + 1.8 + 3 + 2.3 - 0 = 8

QUESTIONS ASKED		OPPOSITION (SPEECH)		DISCUSSION WITH REPORTER		DISCUSSION WITH OPPONENT		ANSWERS TO JURY and REVIEWER'S QUESTIONS	
0	almost no, irrelevant	time used almost no	understanding of presentation almost nothing	relevant topics addressed no or irrelevant	correct own opinions expressed almost no	scientific contribution of topics irrelevant	own opinions presented very little	efficiency almost no	concise and correct or no questions asked
1	some relevant, aimed at resolving some unclear points	very little	some main points	few	some	little	some	to some extent	some incorrect
2	short allowing short answers, prioritized, all time used	not all	main points	some	to important topics	partial	some correct	leading or cooperative	inconclusive or too long
3		almost all	all relevant points	many	to most topics	good	many correct	quite efficient	deeply incorrect or show deep misconceptions
4		efficiently	practically all points	practically all	+ improvement suggestions	new crucial point(s)	almost all suggestions	very efficient	

NOTES:

Mont of pressure - good.

REVIEWER

Start from 1 and add/subtract
 1 + 2 + 2 + 2 - 0 = 7

QUESTIONS ASKED		REVIEW OF OPPOSITION		REVIEW OF OPPONENT		ANSWERS TO JURY QUESTIONS	
0	too few, mostly irrelevant	report summary & understanding poor	discussion analysis almost no	speech summary poor	discussion analysis almost no	pros & cons irrelevant	concise and correct or no questions asked
1	some relevant, sufficient number, could clear things out	partial	too short/long	too short/long	too short/long	partially relevant	some incorrect
2	resolved, aimed at both rep. and opp.	good	relevant parts	many	many	mostly adequate	inconclusive or too long
3	+short, apt and clear, well prioritized time managed efficiently	detailed, complex	accurate, conclusive	brief but accurate	accurate, conclusive	fully adequate	deeply incorrect or show deep misconceptions

NOTES: Good on on Dr. Ross Camp discrepancy in velocity below theory & eqn

On flow - scientific value add. Considerate

SCORESHEET

REPORTER: $1 + \frac{1}{2} + \frac{1}{2} - \frac{1}{2} = 3$ stage: 3 fight (round no.): 4 room: A problem no.: 17

Juror's name: Kent Hogan
signature: *KH*

opponent: Australia
reviewer: Chinese Taipei

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	DISCUSSION WITH OPPONENT	DISCUSSION WITH REPORTER	ANSWERS TO JURY, OPPONENT and REVIEWER'S QUESTIONS
0	almost no explanation	almost no theory	too few experiments	no attempt no comparison	others' data, incorrectly cited	misunderstood task	scientific contribution almost no	relevance of topics almost no	0 concise and correct or no questions asked
1	some explanation	some theory	some experiments	some comparison	review of sources, cited	partly fulfilled	only theoretical points raised	some to some extent	-1 some incorrect, inconclusive or too long
2	fair explanation	fair theory	well performed, sufficient number	not well fitting deviations	some input	average	some scientific points raised	leading or cooperative	-2 deeply incorrect or show deep misconceptions
3	good explanation	good theory	+ results explained	qualitatively analysed	some interesting results	interesting solution	interesting points discussed	quite efficient	
4	detailed demonstrative	quite detailed, correct	+ errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	some aspects above average	+ data/theory convincingly supported	very efficient	
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	brought in new physics	productive	

NOTES:

OPPONENT

Start from 1 and add/subtract

$1 + 2 + 2\frac{1}{2} + 2\frac{1}{2} - 0 = 8$

QUESTIONS ASKED	time used	understanding of presentation	relevant topics addressed	correct own opinions expressed	prioritisation	DISCUSSION WITH REPORTER	ANSWERS TO JURY and REVIEWER'S QUESTIONS
0	almost no	almost nothing	no or irrelevant	almost no	no	scientific contribution almost no	0 concise and correct or no questions asked
1	very little	some main points	few	some	almost no	little	-1 some incorrect, inconclusive or too long
2	no	main points	some	to important topics	some	partial	-2 deeply incorrect or show deep misconceptions
3	almost all	all relevant points	many	to most topics	reasonable	good	
4	efficiently	practically all points	practically all	+ improvement suggestions	very good	new crucial point(s)	

NOTES:

REVIEWER

Start from 1 and add/subtract

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

QUESTIONS ASKED	report summary & understanding	discussion analysis	own opinions	pros & cons	prioritisation	REVIEW OF OPPOSITION	ANSWERS TO JURY QUESTIONS
0	too few, mostly irrelevant	almost no	too few	irrelevant	no	speech summary poor	0 concise and correct or no questions asked
1	some relevant, sufficient number, could be clear	almost no	some	partially relevant	almost no	too short/long	-1 some incorrect, inconclusive or too long
2	most time used, many unclear points resolved, aimed at both rep. and opp.	too short/long	many	mostly adequate	some	informative, apt/relevant parts	-2 deeply incorrect or show deep misconceptions
3	+short, apt and clear, well prioritized time managed efficiently	accurate, conclusive	+ improvement suggestions	fully adequate	good	brief but accurate	

NOTES:

Round: 4 Room: A Fight Assistants: ~~Ph~~ Lhui Kong Kin, Clyde, Lok Yee Ling, Ng Weihan



Team	Stage 1			Stage 2			Stage 3			Stage 4		
	Brazil Rep	Chinese Taipei Opp	Australia Rev	Chinese Taipei Rep	Australia Opp	Brazil Rev	Australia Rep	Brazil Opp	Chinese Taipei Rev	Rep	Opp	Rev
Valentin Lobyshev	6	5	6	8	7	8	4	6	6			
Ian Nery Chan	6	6	7	6	6	6	4	5	6			
Leszek Gladczuk	4	6	6	6	6	7	4	8	7			
Kent Hagan	7	7	7	5	6	7	3	8	6			
Teck Seng Koh	6	6	7	5	6	7	4	8	7			
Acting Team Member	Vitor Tamae	An-Jung Huang	Daniel Campbell	An-Jung Huang	Daniel Campbell	Roberto Saito	Theyjan Clankayer	Vitor Tamae	Yu-Hsi Wang			
Rejected Problems	—			—			—					
Accepted Problem	11- Hair Hygrometer			12 Torsion Gyroscope			17 Vacuum Bazooka					

Signature Fight Assistant: *Ng Weihan* Double-checked with Scoring Guidelines by second Fight Assistant (signature): *[Signature]*