

N°7

Thursday, July 24th

—PHYSICS— BEYOND FRONTIERS



International
Physics Olympiad
FRANCE 2025

Au revoir

Boat cruise

Orsay museum

IPhO - France 2025

awards





The greatest thanks to our partners and a warm farewell to all!

As the lively closing ceremony and awards presentation come to an end, it is high time for the IPhO organisers to express their warmest gratitude to all the IPhO 2025 partners. Together, they made a vital contribution to our event, both in kind and financially. In the name of Société française de Physique and of the cooperating institutions in organizing the event, I want to word out heartfelt thanks to over 50 partners without whom hosting IPhO 2025 in France could just not have happened.

A first mention goes to our three diamond level partners, (alphabetically) Jane Street, Qube Research and Technology, and Squarepoint. Our participants have had various opportunities to enjoy their partnership actions.

Our two platinum partnerships were with the French company Thales, who among others created a special solidarity award accessible to selected deserving contestants. The International Board Secretariat maintains cooperation with Huawei, who offered support for selected teams in need and contributed a special session.

Those are only some outstanding cases

of the wonderful experience that we enjoyed through our interactions with those partners, including among others physics oriented companies, startup businesses, and higher education or research institutions. Let them all be praised for their contribution to our virtuous effort to bring the “Olympic spirit” at the highest international level of demanding training in physics, for the sake of expanding human knowledge, of developing new technologies and of educating new generations for the 21st century human society worldwide!

While everyone will be heading home in the few hours following the closing ceremony – or will use the opportunity to see more of our country, we hope that 2025 will be one memorable IPhO experience for all of you, and wish a great event to our successors who will be hosting IPhO 2026 in Columbia with a new cohort of contestants: *vive les Olympiades internationales de physique!*

Pierre Chavel

Committee co-chair
Institut d’Optique Graduate
School, former research scientist,
Centre national de la recherche
scientifique



Two years ago, in July 2023, the French Physical Society faced the challenge of organizing the IPhO 2025. It accepted the task with some apprehension, aware of the enormity of the undertaking. Indeed, it has been quite a challenge – but here we are. Thanks to the exemplary dedication of many French Physical Society members who gave their time generously, thanks to a large number of volunteers who welcomed you, and the commitment of the employees of the French Physical Society (SFP), we dare to believe that this tremendous effort has been a success.

On behalf of the entire French Physical Society, I want to extend a heartfelt thank you to all of them – and of course, we must not forget the Scientific committee, who prepared the exams under the leadership of Yannick Almeras, and the Organizing committee, led by Pierre Chavel and Dominique Obert.

Once again, congratulations to all the candidates and team leaders. It has been a true pleasure to welcome you to France for this wonderful adventure, combining top-level science, culture, personal exchanges, and friendship.

Daniel Rouan

Vice President of the French
Physical Society





YESTERDAY'S HIGHLIGHTS

Boat cruise



Orsay museum



LIST OF IPhO 2025 MEDALS WINNERS

Special prizes

In addition to the gold, bronze and silver medals, 4 prizes has been awarded:

Best Female: « Claudine Hermann Prize »

rewarded to **KAKAMYRADOVA Aysenem** (Turkmenistan)

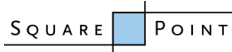
Best Performance in Experimental Examination: « Etienne Guyon Prize »

rewarded to **STAN Ionut-Gabriel** (Romania)

Sponsored by  **Jane Street**

Best Performance in Theoretical Examination: « Pierre Gilles de Gennes Prize »

rewarded to **TONG Pengyu** (China)

Sponsored by  **S Q U A R E P O I N T**

Absolute Winner: « Claude Cohen-Tannoudji Prize »

rewarded to **LEE Hyeokjoon** (Korea)

Sponsored by  **QRT**

Additional prizes have been awarded by

ITER: to honor diversity, to **Turkmenistan France, Azerbaijan and North Macedonia**



CNES: for a candidate from a European partner country of CNES. A parabolic flight offered to **STAN Ionut-Gabriel** (Romania)



Gold medals

Houlai Zhou (Australia)
Yichen Yang (Australia)
Jinshu Dong (China)
Xiao Ling (China)
Pengyu Tong (China)
Zijian Guo (China)
Bill Fu (Hong Kong)
Sze Ho Edison Fu (Hong Kong)
Lok Hei Qiao (Hong Kong)
Lincoln Liu (Hong Kong)
Kanishk Jain (India)
Riddhesh Anant Bendale (India)
Snehil Jha (India)
Alon Hart (Israel)
Kento Kakutani (Japan)
Yota Sato (Japan)
Taisei Hamada (Japan)
Yeonho Lee (Korea (Republic of))
Hyeokjoon Lee (Korea (Republic of))
Jungmin Choi (Korea (Republic of))
Jihyeong Han (Korea (Republic of))
Mikhail Aronov (Oly Team of Individuals 2)
Grigorii Grechkin (Oly Team of Individuals 2)
Ivan Lukin (Oly Team of Individuals 2)
Ionut-Gabriel Stan (Romania)
Kai Wen Teo (Singapore)
Aljaz Erman (Slovenia)
Sirawish Musikasopon (Thailand)
Chung-Ta Tsai (Taiwan)
Chung-Chin Ho (Taiwan)
Yun-Chieh Su (Taiwan)
Agastya Goel (United States of America)
Allen Li (United States of America)
Joshua Thomas Wang (United States of America)
Feodor Alexey Yevtushenko (United States of America)
Brian Zhang (United States of America)

The Quan Nguyen (Viet Nam)

Silver medals

Owen Wang Zhai (Australia)
Matthew Junhao Yan (Australia)
Ibrahim Valehli (Azerbaijan)
Bruno Machado Feltran (Brazil)
Felipe Brandao Souto (Brazil)
João Victor Evers Cordeiro (Brazil)
Paulo Vinicius Rodrigues De Azevedo (Brazil)
Hongyi Huang (Canada)
Robert Yang (Canada)
Zander Li (Canada)
Haoyu Tian (China)
Jakub Kubica (Czechia)
Martin Kudrna (Czechia)
Oliver Eckstadt (Germany)
Mihkel Rannut (Estonia)
Ralf Robert Paabo (Estonia)
Saskia Põldmaa, (Estonia)
Hugo Chartoire (France)
Marie Gaillard (France)
Harik Sodhi (United Kingdom of Great Britain and Northern Ireland)
Ojas Tiwari (United Kingdom of Great Britain and Northern Ireland)
Chi Fung Leung (Hong Kong)
Miklós Tété (Hungary)
Kolos Barnabás Tóth (Hungary)
Aagam Jignesh Shah (India)
Rajit Gupta (India)
Arya Zarabi (Iran (Islamic Republic of))
Ilya Ghashaee (Iran (Islamic Republic of))
Mohammadhassan Golabdar (Iran (Islamic Republic of))

Mohammadhasan Sadeghinejad Simaki Iran (Islamic Republic of)
Milad Mohammadi (Iran (Islamic Republic of))
Noa Ben Israel (Israel)
Amit Lanis (Israel)
Yuval Moses Zvi (Israel)
Eitan Rutman (Israel)
Alessandro D'orazio (Italy)
Shoji Itami (Japan)
Yusei Idonuma (Japan)
Amirbek Azatbekov (Kazakhstan)
Bekassyl Yelubay (Kazakhstan)
Geunyeong Jang (Korea (Republic of))
Tomas Razbadauskas (Lithuania)
Robertas Juknevičius (Lithuania)
Moritz Nils Rohner (Luxembourg)
Darius Graur (Moldova (Republic of))
Alex Secieru (Moldova (Republic of))
Batzbayar Gurbazar (Mongolia)
Ichinbat Erkhembayar (Mongolia)
Ilya Plastsinin (Oly Team of Individuals 1)
Adrian Grzegorz Rewkowski (Oly Team of Individuals 1)
Viachaslau Kleukin (Oly Team of Individuals 1)
Arseny Kuzniatsou (Oly Team of Individuals 1)
Egor Krivoshchekov (Oly Team of Individuals 2)
Pavel Rukovchuk (Oly Team of Individuals 2)
Mendel-Emanuel Mendelsohn (Romania)
Rares-Felix Tudose (Romania)
Mihai-Bogdan Ciocărlan (Romania)
Alexandru Condrea (Romania)
Mazen Zaid A Alshakhs (Saudi Arabia)
Cheng Le Eng (Singapore)
E-Jie Tan (Singapore)
Raphael Zhi Xiang Teng (Singapore)
Matteo Jude Sze Yu Wee (Singapore)
Andrej Drobnyaković (Serbia)

Janko Popović (Serbia)
Enej Jauk (Slovenia)
Primož Markovič (Slovenia)
Phattharaphon Thanaphithak (Thailand)
Prach Amphon (Thailand)
Mahriban Kakamyradova (Turkmenistan)
Aysenem Kakamyradova (Turkmenistan)
Kuan-Yu Wang (Taiwan)
Cheng-You Ho (Taiwan)
Volodymyr Ostrovskiy (Ukraine)
Oles Fedirko (Ukraine)
Nazarii Vrashchuk (Ukraine)
Sviatoslav Lavrenyuk (Ukraine)
Cong Vinh Nguyen (Viet Nam)
Duc Dung Truong (Viet Nam)
Le Thien Nhan Tran (Viet Nam)
Ba Khoi Ly (Viet Nam)

3 Bronze medals

Matías Fermín Páez (Argentina)
Narek Galstyan (Armenia)
Vahe Melkonyan (Armenia)
Isaac Chan (Australia)
Benedek Uerge (Austria)
Mahammad Jafarli (Azerbaijan)
Seljan Suleymanli (Azerbaijan)
Leander Gabriel (Belgium)
Hristo Hristov (Bulgaria)
Ilia Nikov (Bulgaria)
Alexander Nikolov (Bulgaria)
Svetoslav Arabov (Bulgaria)
Muhamed Numanovic (Bosnia and Herzegovina)
Eduardo Barbosa De Santana Neto (Brazil)
He Gong (Canada)
Wuhua Zhu (Canada)
David Reichmuth (Switzerland)
Daniel Viktor Theiss (Czechia)
David Košata (Czechia)
Matouš Mišta (Czechia)
Constantin Alexandru Corduban (Germany)
Florian Fieker (Germany)
Lasse Jungermann (Germany)
Dmytro Mintenko (Germany)
Asger Krag Morild (Denmark)
Mathias Lau Bohn-Hansen (Denmark)
Carlos Calderon Alba (Spain)
Adrian Ligorred Obedé (Spain)
Gabriel Prado Izquierdo (Spain)
Uku Nael (Estonia)
Veikka Ilmari Karonen (Finland)
Jussi Vilho Kalervo Pyysalo (Finland)
Aurélie Flieller (France)
Adam Kubica–Djabri (France)
Henry George Kemp (United Kingdom of Great Britain and Northern Ireland)
Peter Heeney (United Kingdom of Great Britain and Northern Ireland)
William Harwood (United Kingdom of Great Britain and Northern Ireland)
Tsotne Giorgadze (Georgia)
Archil Zabakhidze (Georgia)
Georgios Kagiampakis (Greece)
Val Karan (Croatia)
Frane Anđelić (Croatia)
Benedek Bencz (Hungary)
Dorottya Elekes (Hungary)
Daffa Virwandy (Indonesia)
Muhammad Dakita Arfa Alfaritsi (Indonesia)
Muhammad Rakha Naufal Maulana (Indonesia)
Federico Roccaforte (Italy)
Giulio Vertucci (Italy)
Francesco Gariglio (Italy)
Marco Mottese (Italy)
Amir Pshenbayev (Kazakhstan)
Nurgul Yegenbergenova (Kazakhstan)
Artur Kim (Kazakhstan)
Askar Abdiev (Kyrgyzstan)

Emir Anaraly Uulu (Kyrgyzstan)
Kipras Deksnys (Lithuania)
Kārlis Čirts Karnītis (Latvia)
Maksims Hodosevičs (Latvia)
Daniils Koselevs (Latvia)
Hang Chi Ng (Macao)
Cheng Tong Lei (Macao)
Iskra Nechakovska North (Macedonia)
Andrej Stojanovski North (Macedonia)
Munkh-Orgil Munkhtulga (Mongolia)
Azjargal Ganbold (Mongolia)
Enkhugs Delgersaikhan (Mongolia)
Carson Tai Kar Shing (Malaysia)
Ker Wei Han (Malaysia)
Egor Podolskiy (Netherlands (Kingdom of the))
Robert Stepanyan (Netherlands (Kingdom of the))
Daniyal Shahzad Hamid (Pakistan)
Miłosz Jurczak (Poland)
Mikołaj Litwin (Poland)
Adam Albert Gocel (Poland)
Anujraghava Thirukonda Sivakumar (Qatar)
Ali Mohammed A Alhassan (Saudi Arabia)
Hussain Habib A Alsaleh (Saudi Arabia)
Mohammed Abdulrahman M Al Arfaj (Saudi Arabia))
Marián Koval (Slovakia)
Vladimir Slanina (Slovakia)
Tomáš Kubrický (Slovakia)
Richard Dudek (Slovakia)
Svit Miklavcic (Slovenia)
Leshi Zhang (Sweden)
Supamongkol Premanunt (Thailand)
Natchavadee Iamsiribul (Thailand)
Jumadurdy Nuryyev (Turkmenistan)
Dovlet Annamyradov (Turkmenistan)
Oytun Er (Turkiye)
Şenol Tarhan (Turkiye)
Muhammed Doğan Ā–nal (Turkiye)
Alp Terliksiz (Turkiye)
Andrii Zahika (Ukraine)
Nozimjon Tursunali Ugli Shavkatjonov (Uzbekistan)
Elbek Muhiddinovich Urokov (Uzbekistan)

Honorable mentions

Davit Hayrapetyan (Armenia)
Emil Harutyunyan (Armenia)
Matthis Georg Tradel (Austria)
Simon Fink (Austria)
Mathias Frast (Austria)
Konstantin Lorich (Austria)
Murad Khalil (Azerbaijan)
Zeynab Mohammadli (Azerbaijan)
Nell Gosselin (Belgium)
Victor Mei (Belgium)
Aditya Rahman (Bangladesh)
Fahim Farbin (Bangladesh)
Nafis Sadiq (Bangladesh)
Petar Petrov (Bulgaria)
Nedim Begovic (Bosnia and Herzegovina)
Lejla Baturic (Bosnia and Herzegovina)
Filip Kristic (Bosnia and Herzegovina)
Keyner Alexander Avendaño Contreras (Colombia)
Sergio Daneel Santiesteban Sarmiento (Cuba)
Andreas Wetterstein Simonsen (Denmark)
Theodor Petersen (Denmark)
August Høvring Broe (Denmark)
Pau Garcia Tordesillas (Spain)
August Jakobson (Estonia)
Ville Kalervo Kauppinen (Finland)
An Pha Dang (France)
Irakli Mkvabishvili (Georgia)
Promitheas Panagiotis Nikou (Greece)
Luka Duplančić (Croatia)
Karlo Ahel (Croatia)
Gusti Komang Abhika Atmaja (Indonesia)
Arkaan Javier (Indonesia)
Fannar Grétarsson (Iceland)
Aitegin Medetovich Emilbekov (Kyrgyzstan)

Bektur Baratali (Kyrgyzstan)
Rakeeb Abdulla Fahim Noor Muhammed (Sri Lanka)
Augustas Ukvalbergas (Lithuania)
Romans Jemeljanovs (Latvia)
Victor Sandu (Moldova (Republic of))
Vadim Arhip (Moldova (Republic of))
Diego Medina Pelaez (Mexico)
Damjan Stojanov North (Macedonia)
Jovan Janković (Montenegro)
Jasper van der Geer (Netherlands (Kingdom of the))
Jannick van Eeghem (Netherlands (Kingdom of the))
Kanstantsin Shmiarko (Oly Team of Individuals 1)
Muhammad Bilal (Pakistan)
Alfonso Miguel Cruz Dizon (Philippines)
Emmanuel James Villamil Laforteza (Philippines)
Borys Maciej Wawrzynów (Poland)
Gustavo Rebelo de Sousa (Portugal)
Tiago Filipe Neves de Oliveira (Portugal)
Ricardo Filipe Coelho Prata (Portugal)
Dušan Lazić (Serbia)
Nikola Nešović (Serbia)
Lujza Lea Lavriková (Slovakia)
Blaž Gašperlin (Slovenia)
Erik Per Bengtsson (Sweden)
Allan Ismail (Sweden)
Tor Allan Lonnert (Sweden)
Haya Hawat (Syrian Arab Republic)
Kareem Abou Said (Syrian Arab Republic)
Abdul Hadi Chmahan (Syrian Arab Republic)
Ali Chmes (Syrian Arab Republic)
Mukhammadyosin Mamurov (Tajikistan)
Husanjon Salimov (Tajikistan)
Nurgeldi Annagurdov (Turkmenistan)
İclal Asya Aksoy (Turkiye)
Abdulloh Abdurahim Ugli Mamaniyozov (Uzbekistan)
Javohir Sadullaev (Uzbekistan)
Mukhammad Murodovich Abdulmalikov (Uzbekistan)

THE CORE OF THE IPhO REACTOR





Gracias

谢谢

Děkuji

Merci

Obrigado

धन्यवाद

Teşekkür ederim

Thank you

Danke

ありがとう

Grazie

Tack

Ευχαριστώ

أركش



Physics on this day

JULY 24, 1875

Gabriel Lippmann submits his doctoral thesis on electrocapillarity to the Sorbonne University

In this thesis, entitled «Relations entre les phénomènes électriques et capillaires» (Relations between electrical and capillary phenomena), Gabriel Lippmann (1845-1921) describes electrocapillarity: the wetting properties (spreading of a liquid on a surface) as a function of the application of an electrical voltage. He developed a capillary electrometer, consisting of a narrow tube (0.01 mm) containing a column of mercury in contact with acidulated water. A potential difference between the 2 liquids alters the level of the drop of mercury. This electrometer has a sensitivity of one ten-thousandth of a volt. This principle was later used to develop one of the first electrocardiograms.



Answers to Orsay museum quizz

- | | | |
|------------|---|---|
| 1. C | 4. Length ~ 1.95±0.1 m
Height : ~90±5 cm | 6. C and D |
| 2. A | 5. B, C and D | 7. The answer is different for each individual. It is wavelength dependent. |
| 3. A and C | | |

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