



Union Internationale Pour La Science, La Technique et Les Applications du Vide
International Union for Vacuum Science, Technique and Applications
Internationale Union für Vakuum Forschung, Technik und Anwendung

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IUVSTA Communications Committee Co-Chair



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Executive Council Meeting 144

Meeting's location **Masonic Centre Sydney, Sydney, Australia**

September 16th, 14:45 – 18:30, Australian Eastern Standard Time (AEST), Sydney.

The 144th executive council meeting (ECM 144) was the last ECM meeting of the triennium 2022-2025.

The IUVSTA President, François Reniers, opened ECM 144 by welcoming all IUVSTA members and by presenting the triennial report of his Presidency between 2022 and 2025. During the Presidency of François Reniers distinct initiatives were developed in addition to the regular activities of the union. To be highlighted, the changing of the Union statutes to fit with the modern way of organizing formal meetings, taking into consideration the hybrid modes of organization. The new statutes were approved during a hybrid Extraordinary General Meeting on 14th January 2025, 11:00 in Brussels, Belgium, and published on March 27 of 2025. The IUVSTA President acknowledged the Secretary General, Christoph Eisenmenger-Sittner, for the work done on revision of the IUVSTA statutes. In this context, the Secretary General took the opportunity to remind the delegates that proofs of residence not older than three months are legally required by the authorities and the Belgium laws and that should be sent, as soon as possible, to the Secretary General of the triennium 2025-2028, which will be Ana G Silva. Another initiative which impacts on the visibility of the Union is the association of IUVSTA to Earth Humanity



Photo taken during ECM 144 with the presence of some members online. In the photo and on-site, from the left to the right: the scientific secretary Anton Stampfl, the scientific director Katsuyuki Futukani, the president-elect Jay Hendricks, the president François Reniers, the secretary general Christoph Eisenmenger-Sittner, the recording secretary Ana G Silva, and the treasurer Arnaud Delcorte.



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Coalition <https://earth-humanity.org/about/> <https://earth-humanity.org/members/>. To conclude his triennial, report the President express his enthusiasm mentioning the **twenty-two scientific activities** of high-quality, 12 workshops, 3 schools, 3 technical training courses and 4 short shorts were promoted and supported by IUVSTA, representing an injection of money to re-boost science after COVID 19. As a final remark of the triennial Presidency, François Reniers, express his contentment with the extraordinary achievements of IUVSTA and the commitment and engagement of all officers and members which contribute for IUVSTA success. During the meeting the Chair of the Awards & Scholarships committee, Timo Gans, had the pleasure to announce the winners of the IUVSTA Prizes and the winner of the IUVSTA EBARA award of this triennium.



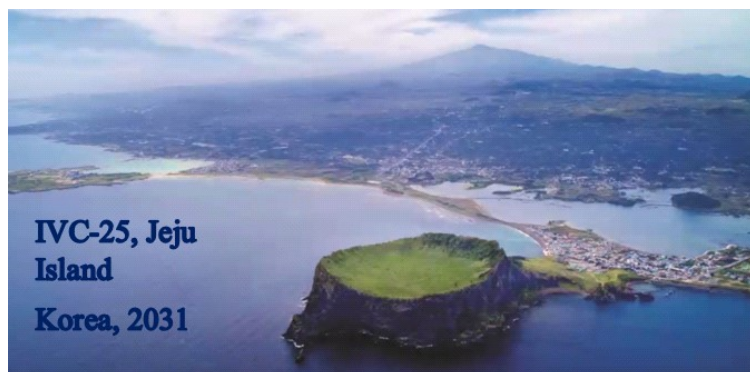
Prof. Guy Le Lay, IUVSTA Prize for Science research in the fields of interest to IUVSTA. Professor Emeritus, Aix-Marseille University, PIIM – CNRS, Marseille, France.



Prof. David N. Ruzic, IUVSTA Prize for Technology for achievements in technology and instrumentation in the fields of interest to IUVSTA. Director of Center for Plasma Material Interactions University of Illinois, Urbana-Champaign, United States of America



IUVSTA EBARA Award Dr. Mattia Bartoli, for the excellent and impactful work demonstrating innovation in advanced vacuum science for sustainable energy solutions. Research Fellow at the Center for Sustainable Future Technologies. Italian Institute of Technology, Turin, Italy



The Chair of the Congress Planning Committee, Carlos Tavares, reported on the successful ECOS-38 conference held in August 2025 in Braga. In addition, Carlos Tavares shortly referred to the IVC – 24 to be held in 2028, in Braga, mentioning a memorandum between Universidade de Coimbra and IUVSTA which is under revision. A report on the organization of ICTF-20 which will be held in June 2026, Biarritz, France was presented. The Korean Vacuum Society presented the bid to host the IVC-25, in Jeju Island, Korea in 2031. The President of the

Korean Vacuum Society introduced the members of the organization of IVC25, which were on-site, during the



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presentation of the bid. In addition, a promotional video of the venue of the congress, Jeju Island, was presented to highlight its natural beauty and cultural heritage. The President, François Reniers, acknowledged the very good proposal presented by the Korean Vacuum Society and asked for an open vote. The proposal of KVS to organize IVC25 in Jeju Island, Korea, in 2031, was unanimously approved. **IVC-25** will be organized by the Korean Vacuum Society (KVS). The Congress will take place in Jeju Island, Korea, in 2031.

The Scientific Director, Katsuyuki Fukutani, presented his triennial report highlighting the high quality of the twelve (12) workshops, three (3) schools which have been organized, as well as the three (3) technical training courses and the four (4) short courses which were promoted and supported in cooperation with the Chair of the educational committee, Alberto Tagliaferro. Moreover, Katsuyuki Fukutani reported on the fruitful meetings with the division Chairs to discuss future activities. During ECM 144 two workshops, one school and one technical training course were presented, discussed and submitted to vote. Below the Workshops, Schools, Technical courses and short courses approved and supported by IUVSTA



- 109th IUVSTA Workshop on *"The APPEC Technology Forum Vacuum and Cryogenics- Industry meets Academia"*, to be held in Maastricht, The Netherlands, 24-26 Nov 2025. The workshop was approved unanimously by ECM 144



- 110th IUVSTA Workshop on *"Advanced Plasma Diagnostics for Surface Engineering and Film Deposition"*, to be held in Golden, Colorado, USA, October 5-8, 2026. The workshop was approved unanimously by ECM 144



- 22nd IUVSTA School on *"Nanoscience Summer School Yachay"* (NSSY2026), to be held Galapagos Island, Ecuador, May 17-23, 2026. The school was approved unanimously at ECM 144

- 31st TTC on *"IUVSTA TTC on Aerospace Technologies"*, to be held in Islamabad, Pakistan, December 24-25, 2025

Ana G Silva
Secretary General
2025-2028



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General Meeting 22; Executive Council Meeting 145

Meeting's location Masonic Centre Sydney, Sydney, Australia,

Thursday September 18th from 14:00 – 17:00 , Australian Eastern Standard Time (AEST), Sydney.

Elections for the triennium 2025-2028

Transfer of Presidency from Francois Reniers (Belgium) to Jay Hendricks (USA)

The Secretary General, C. Eisenmenger-Sittner (2022-2025) explained the procedure of the elections of the President Elect.

Each vacuum society can propose a candidate for President Elect. For the triennium 2025-2028 Freek T. Molkenboer was nominated by the Executive Council for President Elect. The President, François Reniers, called for the vote for Freek T. Molkenboer.

Freek T. Molkenboer was then voted and accepted by the General Assembly 22 as President elect. At this point, The President outgoing president, Prof. François Reniers (Belgium), transferred the IUVSTA Presidency to Dr. Jay Hendricks (USA).

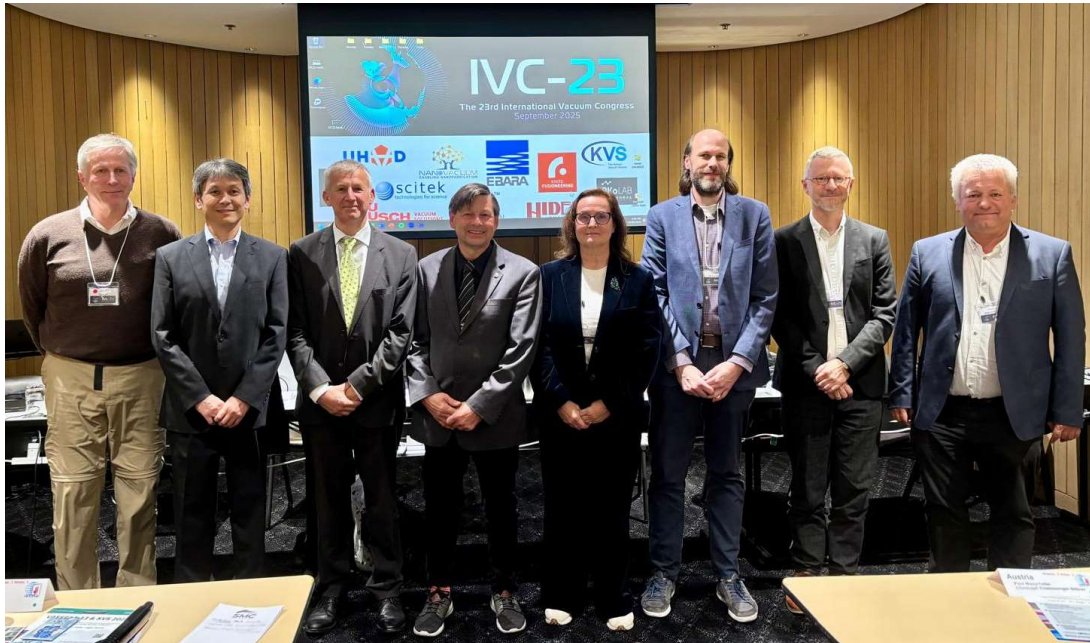


Outgoing president, François Reniers (Belgium), transfers the IUVSTA Presidency to Jay Hendricks (USA).

The following Officers were nominated by the incoming President Jay Hendricks for the triennium 2025-2028: Scientific Director - K. Fukutani (Japan), Secretary General - Prof Ana G. Silva (Portugal), Treasure Prof A. Delcorte (Belgium).



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Pictured above, from Left to Right: Upon approval at the GM22

Scientific Secretary A. Stampfl (Australia), Scientific Director K. Fukutani (Japan), Immediate Past President Francois Reniers (Belgium), Incoming President, Jay Hendricks (USA), Secretary General Prof Ana G. Silva (Portugal), President Elect Frek T. Molkenboer (The Netherlands), Treasurer Prof A. Delcorte (Belgium), and Recording Secretary, Prof. Christoph Eisenmenger-Sittner (Austria)

Ratification of National Directors & Alternate Directors

The Secretary General, Ana Silva, shared the screen presenting the list of the Directors & Alternate Directors (the former Councillors and Alternates, according to the old Statutes of the Union). The Recording Secretary remarked that Finland and Poland still had to submit names of Alternate Directors. The Secretary General asked the General Assembly to ratify this list under the provision that Finland and Poland would supply the names of the Alternate Directors as soon as possible. The National committees were unanimously approved by the General Assembly under the above-mentioned provisions.

Recognition of retiring Officers and ECM members

The Past President, Francois, acknowledged and recognized all members and officers for their valuable contribution to IUVSTA. He presented special thanks to Ana Silva (outgoing Recording Secretary), Arnaud Delcorte (Outgoing Treasurer), Anton Stampfl (Outgoing Scientific Secretary), Jay Hendricks (Outgoing President Elect), Anouk Galtayries (Outgoing Past President), Katsuyuki Fukutani (Outgoing Scientific Director) and



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Christoph Eisenmenger-Sittner (Outgoing Secretary General). The President, Jay Hendricks expressed his sincere Thanks to the Past President, Francois Reniers

- **NEW Scientific Division was established “IUVSTA Sustainability Division”.**

The Secretary General, Ana Silva, presented the aims and actions of the Sustainability Working group. The President asked for a vote on the Creation of a Sustainability Division. This was unanimously approved by the General Assembly. The officers of this new division for the triennium 2025-2028 are Nina Schalk, Chair, Anouk Galtayries, Vice-Chair and Marcus Hans, Secretary.

- **Approval of subscriptions rates for each of the three financial years 2026, 2027, 2028**

The Treasurer, Arnauld Delcorte, proposed to raise subscription rates for 2026, 2027 and 2028 by approx. 6,5% from EUR 150 to EUR 160 per share. This proposal, together with the proposal for the framework Budget for 2026, 2027 and 2028, was unanimously ratified by the General Assembly 22 with one abstention.

Ana G Silva

IUVSTA Secretary General
2025-2028



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Statement of the Secretary General of IUVSTA, Prof. Ana Gomes Silva



Ana Gomes Silva is Associate Professor in Physics Department of NOVA School of Science and Technology (FCT-NOVA), NOVA University of Lisbon (UNL), Portugal. Her main fields or research are ultrafast nonlinear optical phenomena applied to surface/interface and on nanometer structures, and in-situ high/resolution high-surface/interface sensitivity photoelectron spectroscopy (XPS, UPS, XAS) using synchrotron radiation.

As Secretary General of IUVSTA it is my privilege to address you at a time when the importance of our fields has never been more profound, looking for innovation while committed to economic, environmental sustainability for the benefit of society. Vacuum science, techniques and applications lie at the foundation of countless modern technologies—from advanced materials and thin films to semiconductor manufacturing, surface engineering, nanoscience, quantum technologies, and the instrumentation that enables fundamental discoveries in physics, chemistry, and life sciences.

IUVSTA brings together scientists, engineers and practitioners from across continents, cultures, and disciplines. In this cooperative spirit, the Union reaffirms its commitment to open scientific exchange, high professional standards, and the development of the next generation of researchers. We continue to support training schools, workshops, congresses, and technical divisions that foster deep expertise while building bridges between emerging and established fields.

IUVSTA will continue to champion the values that define the union: scientific rigor, innovation, inclusiveness, and the responsible advancement of knowledge. We will expand opportunities for collaboration, encourage interdisciplinary thinking and strengthen the global networks that drive technological and scientific breakthroughs, contributing to a future shaped by knowledge, creativity and cooperation.

As secretary general, I feel privileged and honoured to work with you. I am committed to supporting innovative ideas, strengthening internal processes, and helping the organization adapt to emerging opportunities while staying true to its core mission, contributing to continued growth, stability, and success.

Ana G Silva

IUVSTA Secretary General
2025-2028



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A hybrid ECM-146 will take place in conjunction with ICMCTF-52, 20-21, April 2026

The ECM will be held as a hybrid meeting, jointly with the annual ICMCTF meeting in San Diego
<https://icmctf2026.avs.org/>



- The dates of the ECM would be Monday, April 20 – Tuesday, April 21, 2026. On Wednesday, April 22, 2026, a special on-site IUVSTA session will be included as part of the ICMCTF program.
- On-site ECM participants would register as conference attendees and receive a full week fee waiver (\$890 value) for ICMCTF and ECM with the provision that they must stay at the conference hotel.
- With this registration fee waiver, ECM attendees also will receive complimentary food and beverage furnished by ICMCTF: 9 Coffee Breaks, Monday Mixer, Tuesday Exhibit Lunch, Exhibit Reception, Wednesday Exhibit Lunch, Wednesday evening Awards Reception, Poster Reception on Thursday.
- Hotel room rates are provided below.

GUEST ROOM RATES:

Rates for your meeting are confirmed as follows:

Room	Single Rate	Double Rate	Triple Rate	Quad Rate
Run of House	\$230.00	\$230.00	\$250.00	\$270.00
Staff	\$175.00	\$175.00	\$195.00	\$215.00
Students	\$188.00	\$188.00	\$208.00	\$228.00
Suites	\$230.00	\$230.00	\$250.00	\$270.00

Room rates quoted above are non-commissionable, net rates, subject to tax, which is currently 10.5%, and the California Tourism Assessment Fee, which is currently 0.3%, and the San Diego Tourism District Assessment, which is currently 2%.

For on-site registration send an email to Ivan Petrov (petrov@illinois.edu) and Jay Hendricks (jay.hendricks@nist.gov) and you will be given further information.



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An IUVSTA Endorsed Conference <https://icmctf2026.avs.org/>



“Surface Engineering: Shaping Future Materials”

The 52nd International Conference on Metallurgical Coatings and Thin Films will take place at the Town & Country Hotel and Convention Center in San Diego, California, USA, from April 19-24, 2026. ICMCTF is the leading international event for thin film deposition, characterization, and advanced surface engineering, fostering global exchange of ideas and information among students, scientists, technologists, and manufacturers. The technical sessions at ICMCTF 2026 will focus on a central theme of materials, surface engineering processes, and applications relevant to the development of future materials, with sustainability as a core element. The preliminary program is available on-line on Dec. 1, 2025. It features a distinguished lineup of invited speakers and contributions across more than 40 sessions, including technical symposia, plenary and keynote lectures, short courses (the ICMCTF Academy), an awards program, and daily social networking events. An extensive exhibition showcasing equipment, materials, technical literature, and new technologies is a key component of the conference. **There is still an opportunity to submit your most recent results, as we are accepting Late Contributed Abstract Submissions through February 23, 2026.**

- Technical Symposia -

- PP. Plasma and Vapor Deposition Processes
- MA. Protective and High Temperature Coatings
- MB. Functional Thin Films and Surfaces
- MC. Tribology and Mechanics of Coatings and Surfaces
- MD. Surface Engineering of Biomaterials, Devices, and Regenerative Materials: Health, Food, and Agriculture Applications
- CM. Advanced Characterization Modelling and Data Science for Coatings and Thin Films
- IA. Surface Engineering – Applied Research and Industrial Applications
- TS1. Coatings for Batteries and Hydrogen Applications
- TS2. Coatings and Surfaces for Renewable Energy Technology
- TS3. Circular Strategies for Surface Engineering

Sandra E. Rodil, ICMCTF 2026 Program Chair; **Peter Kelly**, ICMCTF 2026 General Chair



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Report on the 105th IUVSTA Workshop



The 4-day-long 105th IUVSTA Workshop, which started on Tuesday 21st October 2025 at 15:00 and finished on Friday 24th October at 19:00, was held at Best Western Hotel Regina Elena, located on the seafront that connects Santa Margherita Ligure and Portofino, between the Regional Natural Park and the sea of the Gulf of Tigullio and the Marine Protected Area of Portofino.

The event provided an opportunity for the exchange of knowledge and experience of experts from various institutions and industries. It was organised by Associazione Italiana di Scienza e Tecnologia (AIV), with support of IUVSTA, Physics Department - University of Genova, and a commercial sponsor. This workshop has introduced IUVSTA to a scientific community that had not previously been involved with the association. There were several inquiries for information about our organization and positive feedback.

The IUVSTA workshop had the financial support by: the Physics Department, University of Genoa, the Associazione Italiana di Scienza e Tecnologia AIV, Gambetti Kenologia, AMETEK Mocon, and SAES Getters.



The scientific program consisted of 5 Sessions distributed over four days. The presentations were divided in five hot topics, from theoretical aspects to applications: Gas transport models / Vacuum Science and Technology / Membranes & Thin Films Technology / Metrology and modelling of gas transport / Apparatus for gas transport measurements. The workshop session included 10-invited presentations from prominent scientists of Vacuum and Membrane Science and Technology



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communities and 19 presentations from other participants (followed by open 60-min long discussion at the end of each Session. The total number of the workshop participants was 33 (4 participants with no contributions). The participants equally represented from 9 countries of 2 continents of Asia and Europe.



All participants were housed in the same hotel to encourage close communication among the delegates to enhance future collaboration between different group of industries, research community and accelerator centres.

AIV decided to award the best presentation with a Plaque with Certificate of Excellence in Scientific Presentation Conference and a Voucher for free registration to the AIV's next conference. Evaluation criteria included clarity of explanation, methodological rigor, and innovative contribution to the scientific dialogue. The panel was composed of

Paolo Chiggiato and Maria Grazia De Angelis, established scientists in the fields of Vacuum and Membranes respectively. AIV decided on this initiative as a stimulus and motivation for young researchers who intend to pursue a career far from the comforts of home, around the world.

The workshop also included social events like: Welcome reception - Portofino Tour - Workshop Banquet.

The workshop successfully achieved all its objectives, fostering fruitful discussions and collaborations among experts in the field. The feedback from participants was overwhelmingly positive, highlighted how the organization has enabled overcoming the challenge of making two different scientific communities communicate profitably on a common topic. The organizing and international committees can undoubtedly be proud to have achieved such an ambitious objective.

We express our gratitude to IUVSTA, Physics Department of University of Genoa, sponsor and all participants for their contributions to the success of this workshop. On behalf of the Organising Committee for 105th IUVSTA Workshop on Characterization of gas transport through materials: application to Vacuum Science and Technology.

Prof. Giuseppe Firpo (Chair)



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Report on 109th IUVSTA Workshop

From 24 till 26 November 2025 the 109th IUVSTA workshop, APPEC Tech Forum Vacuum & Cryogenics, Industry meets Academia took place in the Sint-Jans Church in Maastricht (The Netherlands).

The organizers and the participants look back on a successful workshop with 17 high quality presentations from academia and 12 interesting pitches of capability from the industrial partners of the workshop. The invited plenary speakers from European large-scale experiments from the field such as neutrino physics, Dark Matter searches, cosmic microwave background, and gravitational wave observatories reported on the challenging requirements for vacuum and cryogenics. One such experiment is the proposed Einstein Telescope, a gravitational wave detector that extends the current range of experiments to the edge of the universe, close to the time of the Big Bang. It requires 120 km of 1-m diameter UHV beampipes and more than 100 UHV chambers with diameters up to 4.5 m and heights of 15 m. Some of these UHV towers include cryostats for the 10 K mirrors of the interferometers that are intended to measure space-time oscillations that change the diameter of the earth by the diameter of a proton.

The contributed presentation came from:

Plenary Speaker	Affiliation	Experiments	Field
Thomas Thuemmler	KIT	P8/QTNM/Katrin/Ptolemy	Neutrinos
Marco Röllig	KIT	Atomic tritium source	Neutrinos
Raimund Strauss	TUM	NUCLEUS	Neutrinos
Caroline Fabre	CERN	DUNE	Neutrinos
Bernhard Schwingenheuer	MPI Heidelberg	LEGEND	Neutrinos
Paolo Gorla	LNGS	CRESST/CUORE/CUPID	Neutrinos, DM
Bianca Bottino	University Genova	DS-20k	Dark Matter
Lutz Althüser	University Münster	XENON/XLZD	Dark Matter
Christian Weinheimer	University Münster	Xenon Cleaning technology	Dark Matter
Joern Schaffran	DESY	ALPS/IAXO/MADMAX	Dark Matter
Manuel Gonzalez	APC-CNRS	QUBIC	CMB
Andrea Tartari	INFN-Pisa	LiteBIRD	CMB
Antonio Pasqualetti	EGO	Virgo/Geo600	Gravitational Waves
Carlo Scarcia	CERN	ET beamline	Gravitational Waves
Fulvio Ricci	University of Rome	ET cryo/vacuum towers	Gravitational Waves
Keith Middleman	ASTEC	ASTEC	Vacuum Technology
Henk-Jan Bulten	NIKHEF	Etpathfinder	Gravitational Waves

Workshop attendees enjoyed the iconic setting in the 14th century gothic church in the center of Maastricht. According to participants, this surrounding inspired many detailed discussions between industry and academia during the long coffee breaks. These breaks also provided ample time to visit the small industry exhibition and learn more on available technologies.



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Matching both perspectives proved to be valuable as was discussed during the two panel discussions, one on cryogenics and the other one on vacuum technology. In particular the identified shortcomings and suggested improvements in communication between scientists and project engineers from industry and the question when to inform and possibly involve industry in the planning of large-scale experiments was a strongly debated topic.

At the end of the workshop the participants had a chance to visit the ET pathfinder experiment at the University of Maastricht, a R&D facility to develop and test new technologies for the cryogenic interferometers of the Einstein telescope.



There were 103 participants in the workshop from 11 Countries: Austria, Belgium, France, Germany, Italy, Netherlands, Poland, Spain, Sweden, Switzerland, and UK

Most presentations and the teaser presentations on YouTube can be found on the workshop website:
<https://indico.cern.ch/event/1514758/overview>

Joachim Wolf, F.T. (Freek) Molkenboer, Rob van der Meer