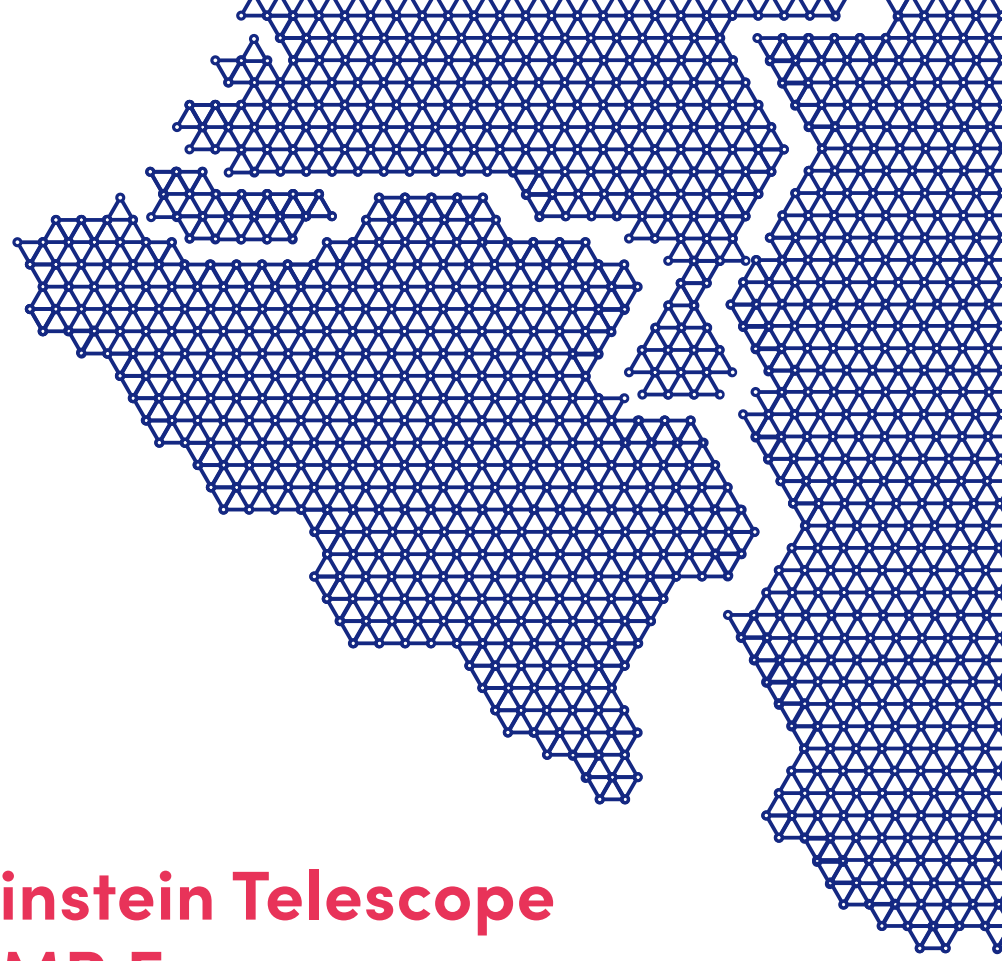


Einstein Telescope EMR Forum

Solvay Library, Brussels

APRIL 10TH, 2024 | 10.00-17.30 hrs

Strategic event for collaboration and funding for hosting the Einstein Telescope in the Euregio Meuse-Rhine.

Einstein Telescope

Einstein Telescope EMR Forum

The underground Einstein Telescope will be Europe's most advanced observatory for gravitational waves. It will allow researchers to hear black holes collide and learn about the early universe.

The three 10-kilometer tunnels of the Einstein Telescope will be sited 250 to 300 meters underground in order to make undisturbed measurements of gravitational waves. Above ground, hardly anything will be visible of the observatory.

The Netherlands, Belgium and Germany are jointly studying whether to host this world-class observatory in the Euregio Meuse-Rhine.

Einstein Telescope EMR Forum

The Einstein Telescope EMR Forum is a strategic event for collaboration and funding for hosting the Einstein Telescope in the Euregio Meuse-Rhine. The Forum is dedicated to exploring European cooperation in the fields of all the advanced technologies associated with gravitational wave detection and building of underground observatories.

The forum takes place on Wednesday April 10th from 10.00-17.30 hrs. at the historical Solvay Library in Brussels, Belgium.

This Forum is intended for European companies, governments and knowledge institutes that want to be part of the Einstein Telescope community joined together in the adventure to establish this observatory in the Euregio Meuse-Rhine.

www.einsteintelescope.nl/en/welcome/

Program

09.30-10.00 hrs	Doors open
10.00-12.00 hrs	**Plenary:** 10.00-10.10: Welcome by **Marinda Hall**, Master of Ceremony 10:10-10:15: Opening of the Forum by **Stan Bentvelsen**, Scientific Director at the Einstein Telescope EMR Project Office and Director at the Dutch National Institute for Subatomic Physics Nikhef 10.15-10.45: Interview by Marinda Hall with **Thomas Dermine**, State Secretary for Science Policy, Recovery Program and Strategic Investments at the Belgian Federal Government 10.45-11.30: **Keynote speaker Leonardo Biagioni** (see below for an introduction) on "A broader perspective of Big Science" 11.30-12.00: Mini class "Introducing the Einstein Telescope" by **Gideon Koekoek**, Associate Professor, Department of Gravitational Waves and Fundamental Physics, Maastricht University.
12.00-13.00 hrs	Lunch break
13.00-14.30 hrs	**Breakout sessions:** See below for an introduction. On the registration form you can indicate which breakout session you want to attend.
14.30-15.00 hrs	Coffee break
15.00-17.30 hrs	**Plenary:** - Interactive matchmaking: finding the right person to talk to - **Keynote speaker Thomas Hertog** (see below for an introduction) On the Origin of Time. Hertog takes you on a dazzling journey through the cosmos, to black holes, cosmic holograms and far back in time, to our deepest origins. - Plenary wrap up of the Forum..

After the Forum, you are also welcome to join:

- a guided tour inside and outside the Solvay Library, from 17.30-18.15 hrs
- the Apéro Limburgeois for drinks and networking, at 18.15 hrs. in the Solvay Library (registration required)

Keynote speaker

Leonardo Biagioni

Dr. Leonardo Biagioni is Deputy Chief Financial Officer and Acting Head of ITER Programme at the European Joint Undertaking for ITER and the Development of Fusion Energy (F4E). He joined F4E in late 2008 and has since then held several management positions for Contracts, Procurement, Industrial Policy, Finance, Projects, Operations.

Before joining F4E he worked in engineering, project and corporate management positions in the aeronautical, defence and space sectors. His career developed in both private and public organizations, in several European countries and the United States.

Dr. Biagioni earned a MS in Aerospace Engineering and a PhD in Plasma Engineering from Universita' degli Studi di Pisa; he further earned post-graduate degrees in Applied Mathematics from Scuola Normale Superiore in Pisa, Business Administration from Wharton/University of Pennsylvania and IESE in Barcelona.

He is an Associate Fellow of the American Institute of Aeronautics and Astronautics and a licensed professional engineer in Italy.

Keynote speaker

Thomas Hertog

Thomas Hertog is an internationally renowned cosmologist and professor at the Catholic University of Leuven, Belgium. He holds a doctorate from the University of Cambridge and worked as a researcher at the University of California, Santa Barbara and CERN in Geneva.

Within Flanders, Hertog is one of the founders of the multi-disciplinary research community that explores the universe through astronomical observations of gravitational waves, ripples of the fabric of space whose existence was predicted by Albert Einstein at the time.

Mr. Hertog recently published 'On the Origin of Time', an international bestseller in which he published the new groundbreaking theory of the Big Bang that he developed with his mentor and colleague Stephen Hawking.

Want to know more? Then watch the video of KU Leuven on the work of Thomas Hertog.

Master of Ceremony

Marinda Hall

Moderator and author of 'Hush, she's going to say something'. Convincing everyone with natural authority' (publication spring 2024). More information: www.marindahall.nl.

The Solvay Library

The Einstein Telescope EMR Forum is organized at the beautiful Solvay Library in Brussels, Belgium. Behind its sober and classic façade, Solvay Library conceals an eclectic style with precious-wood décor, mosaics and colored glass.

This is a magnificent venue created by the vision of one man, Ernest Solvay, in this ancient sociology institute where scientists from around the world came together to share their thoughts and ideas. In this park, Nobel Prize scientists such as Einstein and Bohr gathered for the famous Solvay Conferences. No wonder the venue resonates with brilliant minds!

Read the complete story on
www.edificio.be/bibliotheque-solvay/

Breakout sessions

After lunch, you can attend one of the breakout sessions. These are parallel sessions. Below you will find an overview of the breakout sessions. On the registration form you can indicate which breakout session you want to attend.

I. Einstein Telescope: What's in it for me?

Discover and discuss the societal added value of a Big Science instrument like the Einstein Telescope. By **Gideon Koekoek**, Associate Professor, Department of Gravitational Waves and Fundamental Physics(Maastricht University).

Description and aim of the workshop
Sequel to plenary keynote introduction of the Einstein Telescope: an interactive reflection on the added (societal) value of an instrument like Einstein Telescope. Also connecting to the keynote of Leonardo Biagioni. In his workshop, Gideon takes you through the questions you have about the 'why'? What do we gain from Einstein Telescope? In dialogue with the group, he will cite examples from other big science projects that have had major societal impact. He will also explore what you think and experience with regard to Einstein Telescope.

For whom?
This workshop is suitable for a wide audience and for anyone who wonders what the added value of an instrument like ET can be.

II. ET Instrument technology challenges

Discover the technological challenges of the next generation interferometer and how companies and scientists can collaborate on technological innovation. By **Annick Pierrard**, Senior Research Officer (Faculty of Applied Sciences, University of Liège), and moderator **Arnaud Stiepen**.

Description and aim of the workshop
This session focuses on the technological challenges for the development of the next generation interferometer and raising awareness of the technological requirements and opportunities for business innovation and growth.

For whom?
This session is primarily aimed at companies involved in specific technological areas such as vibration-free cooling, vacuum technology, vibration damping, optics and optical metrology, thermal deformation, sensor technology, mirrors and mirror coating, advanced control algorithms.
It is also aimed at scientists, business developers and industrial liaison officers.

Breakout sessions

III. Building the Einstein Telescope

Share ideas on building large underground infrastructures and construction technologies. By **Maxime Corvilain**, Valorization expert Einstein Telescope (POM Limburg/FWO Research Foundation Flanders) and from Buildwise **Niels Hulsbosch,** R&D Expert – Structural Work Unit and Jeroen Vrijders, R&D program lead Sustainable Development.

Description and aim of the workshop:
This breakout session focuses on underground infrastructure and construction technology. Gain practical insights into the relevance of underground development for business growth.

For whom?
Relevant for companies in (sustainable) building and construction and connected technology domains, business developers, engineers and scientists. This breakout session offers essential knowledge for strategic decision-making in large construction projects.

IV. Sustainable logistics for ET in the Euregio Meuse-Rhine

Exploration of local challenges and opportunities in search of the logistic solutions when building the Einstein Telescope.
By **EMR Logistics - Carine Van Hove** & **Marc Genten**, Policy Advisors @ EGTS EMR.

Description and aim of the workshop:
This breakout session focuses on logistics aspects of building the Einstein Telescope in the Euregio Meuse-Rhine. Examples of focus domains are multi-/synchro modal logistic solutions including rail, inland waterways, road and the smart orchestration and optimization of logistic operations using digital tools & platforms/smart data sharing.

For whom?
Relevant for companies active in the value chain of logistics.

Breakout sessions

V. Cross border strategic collaboration in R&D and valorisation

Sharing ideas and concrete actions on how to realize a joint vision and strategy for R&D and valorisation. By **Jürgen van Gorp**, Sr. Technical Project Manager and R&D coordinator Einstein Telescope at Research Foundation Flanders – FWO, **Patrick Schelvis**, coordinating policy officer knowledge infrastructure at Dutch Ministry of Economic Affairs and Climate Policy and **Loes Borger**, policy officer Economics and Innovation at Dutch Province of Limburg.

Description and aim of the workshop
Science, government and business from three countries are currently working together on a joint mission to host the ET in the Euregio Meuse-Rhine. The Netherlands, Belgium and Germany aim to coordinate a shared valorisation strategy and R&D agenda. In this break-out session you can share your ideas and suggestions for a successful cross-border and strategic collaboration. You will be challenged to look at this topic from your expert point of view: What are the ingredients for success? What are the dos and don'ts? Who should be involved and how? The results of this workshop will be incorporated in the further process creating the shared R&D agenda and valorisation strategy.

For whom?
This workshop is for funding experts, strategic policy makers, valorisation experts, industry liaison officers, R&D managers and coordinators.

How to sign up

The Einstein Telescope EMR Forum can accommodate a maximum of 150 guests. There is no cost to participate, but you must register in advance.

On the registration form you can also indicate which breakout session you want to attend and if you will join the Apéro Limburgeois.

Registration form

After your application, you will receive a confirmation email within a few minutes. Your registration is only guaranteed with our confirmation mail. Have you not received an e-mail within a few minutes after your registration (also check your spam)? Then please contact us.

Wild card

There are limited seats available. Is the event sold out? Then we can put you on the waiting list for a wild card, in case someone unregisters.

Unable to attend, please unregister

Please take into consideration that we have a waiting list for the forum. We kindly request to inform us as soon as you can if you are not able to attend, by sending an e-mail to einsteintelescope@prvlimburg.nl. That way we can give a wild card to someone on the waiting list.

More information

For more information about the Einstein Telescope EMR Forum, please contact the Province of Limburg at einsteintelescope@prvlimburg.nl mentioning ET EMR Forum in your description.

Address and contact Solvay Library

Leopoldpark
Rue Belliard 137
1040 Brussels
+32 2 738 75 96
heritage@edificio.be
www.edificio.be/en/solvay-library/

Accessibility

The Solvay Library is easily accessible via public transports and by car. You can find detailed directions on the Solvay website.

Please note: Traffic and parking are not allowed in Leopold Park. You can park in one of the nearby parking garages.

The Einstein Telescope EMR Forum is sponsored and organized by:

Province of Limburg (NL)
www.limburg.nl

POM Limburg / Province of Limburg (BE)
www.pomlimburg.be
www.limburg.be

Research Foundation Flanders (FWO)
www.fwo.be

In close collaboration with

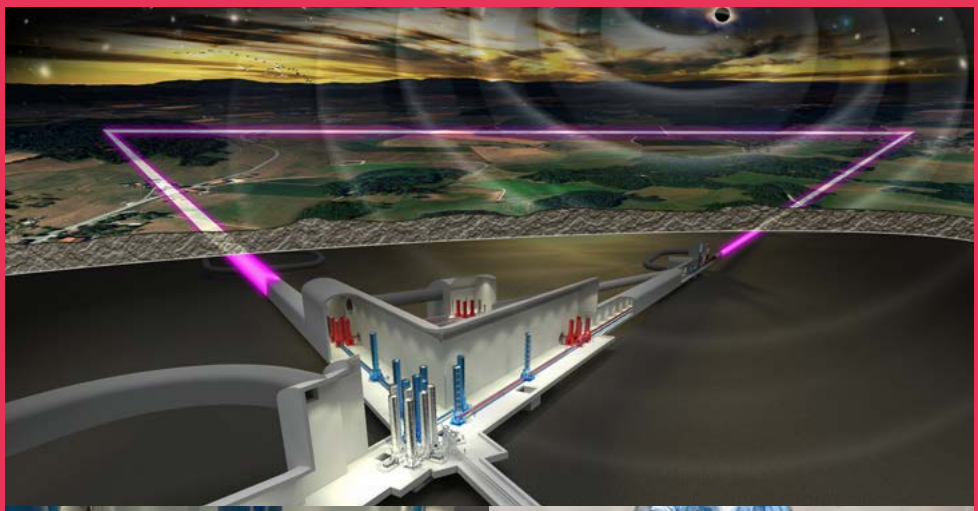
- Belgium: GRE Liège, University of Liège, Euregio Meuse-Rhine EGTC and Wallonie Entreprendre, Benelux Unie, Belspo,
- The Netherlands: Einstein Telescope EMR Project office, Maastricht University, the Ministries of Economics and Education.
- Germany (North Rhine-Westphal): NMWP, AGIT

provincie Limburg

pom Limburg economisch versnellen

fwo Research Foundation Flanders Opening new horizons

provincie Limburg



The Einstein Telescope

The Einstein Telescope is an underground telescope and will be Europe's most advanced gravitational wave observatory. Gravitational waves contain valuable information about the most extreme events in the universe: from the nature of black holes and neutron stars to the first moments after the Big Bang. The observatory is therefore of great importance for international physics and astronomy.

The border region of Belgium, Germany, and the Netherlands is a promising location for the Einstein Telescope, thanks to the unique soil that dampens disruptive vibrations. Good connections and the network of knowledge institutions and companies also make the area attractive. The three countries are therefore jointly investigating whether the observatory can be accommodated in this border area.

You can find detailed information about the Einstein Telescope at www.einsteintelescope-emr.eu. All information on this website is available in German, English, French, and Dutch.