

Stories of the future -Harnessing the power of Digital Twins

Brussels · 23 September 2024 · 5:30 PM

Representation of the Free State of Bavaria to the European Union · Rue Wiertz 77 · 1000 Brussels



Dear Ladies and Gentlemen,

Powerful digital technologies, in particular Artificial Intelligence, will have a profound impact on sustainability research. For the first time, we can now build sophisticated digital models for different compartments of the earth system. The aim is to employ effective tools to support decision making to address environmental challenges and to explore optimised pathways towards a sustainable way of living.

Al-based models and Digital Twins are a priority for Helmholtz in all research fields. Let us discuss how exactly they will help to shape our future in the Earth and Environment domain: What observational data and tools do we need for Digital Twins? What role will Artificial Intelligence and Large Language Models play in their development?

Together with experts from science and policy, we will present current and future applications of Digital Twins and discuss user needs and expectations. We are sure that you will have many additional questions in mind!

I look forward to an inspiring meeting and to a lively exchange of ideas.

Kind regards, () ma d. he le Otmar D. Wiestler, Helmholtz President

Please register before 18th September 2024



Programme

5:30 Get-together

6:00 Welcome

Michael Hinterdobler, Director, Representation of the Free State of Bavaria to the EU

Moderated Talk with

Otmar D. Wiestler, Helmholtz President

Policy Impulse

Philippe Tulkens, European Commission/DG RTD

Round Table: Destination Earth - a groundbreaking approach in climate modelling

- Sabine Attinger, Helmholtz Centre for Environmental Research UFZ
- Thomas Jung, Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research
- Gustav Kalbe, European Commission / DG CNECT

Digital Twins for the future of our earth system

 Susanne Buiter, Helmholtz Vice-President for Earth and Environment and Director, GFZ German Research Centre for Geosciences

Round Table: Benefits of improved seasonal forecasts and Digital Twins for cities

- Daniela Jacob, Helmholtz-Zentrum Hereon/GERICS
- Harald Kunstmann, Karlsruhe Institute of Technology

7:30 "Ask the Expert!" and Networking Reception

Moderated by Kristine August, Helmholtz Office Brussels

Helmholtz in Numbers

46,000

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National labs are dedicated to the big questions of our time every day. 14,500

re dedicated Internal and external stions of scientists from day. all over the world

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Euro budget anually offers our talents excellent conditions for cutting-edge research.