



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

Invitation

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.

AI-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, 

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
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Moderated Talk with

- Otmar D. Wiestler, Helmholtz President
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Policy Impulse

- Elisabetta Balzi, European Commission / DG RTD
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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 (tbc)
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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
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Round Table: Benefits of improved seasonal forecasts and Digital Twins for cities

- Daniela Jacob, Helmholtz-Zentrum Hereon / GERICS
 - Harald Kunstmann, Karlsruhe Institute of Technology
 - tbd
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7:30 **“Ask the Expert!” and Networking Reception**

Moderated by Kristine August, Helmholtz Office Brussels

Helmholtz in Numbers

46,000

Employees at Helmholtz are working on the world of tomorrow.

6 bn.

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

18

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

14,500

Internal and external scientists from all over the world