Physics as a guide to the future

L4T alumni and Bundestag fellows engaged in discussions on the role of physics at the WE-Heraeus Forum.

For 60 years, the Wilhelm and Else Heraeus Foundation has fostered exchange between science and society. As part of Berlin Science Week, the foundation hosted its annual event, the WE-Heraeus Forum, on November 6, 2024, bringing together its community alongside leading figures from science, business, and politics.

Under the guiding theme "Understanding and Shaping the World through Physics," the event provided an inspiring platform to highlight the transformative power of physics. This year, graduates of the foundation's flagship programs—*Leading for Tomorrow* (L4T) and *Science meets Politics*—formed a strong delegation among the participants.

WE-Heraeus-Stiftung, Frank Schröder

Board of Trustees and Managing Director of the WEH Foundation with the Bundestag fellows.

The WE-Heraeus Forum made a powerful statement: Physics is not only the foundation of scientific breakthroughs but also a key element in addressing global challenges. "With our limited resources, we can still make a difference—because we focus on physics," emphasized Jürgen Mlynek, Chairman of the Board of the WE-Heraeus Foundation.

Keynotes and impulse talks, such as those by Nobel Laureate Ferenc Krausz (Max Planck Institute for Quantum Optics in Garching) and Stefan Kappler (Siemens Healthineers), bridged the gap between fundamental research and medical applications. Deep dives invited participants to engage in interactive group discussions on topics such as nuclear fusion, artificial intelligence, big science, and the relevance of physics studies. L4T alumni and Bundestag fellows actively contributed to these debates.

The discussion on the role of physics in the turning point of the era and sustainability was particularly relevant for societal transformation. Approaches to mitigation (reducing greenhouse gas emissions) and adaptation (adjusting to climate change) were explored from both technological and political perspectives. Experts such as Peter Schlosser (Arizona State University), Nadine Schön (Member of Parliament), and Frank Stietz (Heraeus Holding) provided inspiring insights on how innovations in physics can contribute to a more sustainable future.

The geopolitical situation shaped the event: "Crisis is nothing new," said Jürgen Mlynek. "But it is an opportunity to rethink things." He emphasized the importance of evidence-based actions and rule-based processes—principles inherently embedded in the laws of physics. Despite global shifts in power and the technological race, the foundation remains steadfast in its mission to promote innovative solutions. In doing so, it contributes to an optimistic outlook for the future.

A highlight of the event was the gathering of the Bundestag Fellows, who are currently participating in the second cohort of the "*Science meets Politics*" program. The foundation's fellows spend three months in the German Bundestag, where they accompany a Member of Parliament (MdB) and actively contribute to their team, gaining firsthand insights into the political process. At the WE-Heraeus Forum, the current fellows had the opportunity to meet with members of the first cohort.

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L4T alumni also participated once again in the WE-Heraeus Forum.

In discussions with representatives of the foundation, the fellows shared not only their personal experiences in various parliamentary offices but also ideas for the further development of the program. The fellows' network is intended to serve as a platform for long-term exchange and to assist future scholarship holders in navigating their paths. At the WE-Heraeus Forum, the fellows reflected on their experiences and made valuable connections.

Alumni of the DPG Leadership Program "L4T" were also present at the WE-Heraeus Forum. Since 2022, they have formed a dynamic network. On the morning of the annual event, the L4T alumni gathered at the Magnus Haus in Berlin, where they discussed the themes of the forum as well as current and upcoming projects of the network.

The WE-Heraeus Forum 2024 once again highlighted how physics serves as a bridge between science and society. Through inspiring discussions, interactive formats, and a clear vision for the future, this event proves to be a significant catalyst. Programs such as „*Leading for Tomorrow*“ and "*Science meets Politics*" demonstrate how targeted support from the WE-Heraeus Foundation fosters sustainable networks. Participants in both programs are convinced that with physics as a guiding force, sustainable solutions for the world of tomorrow can be created.

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