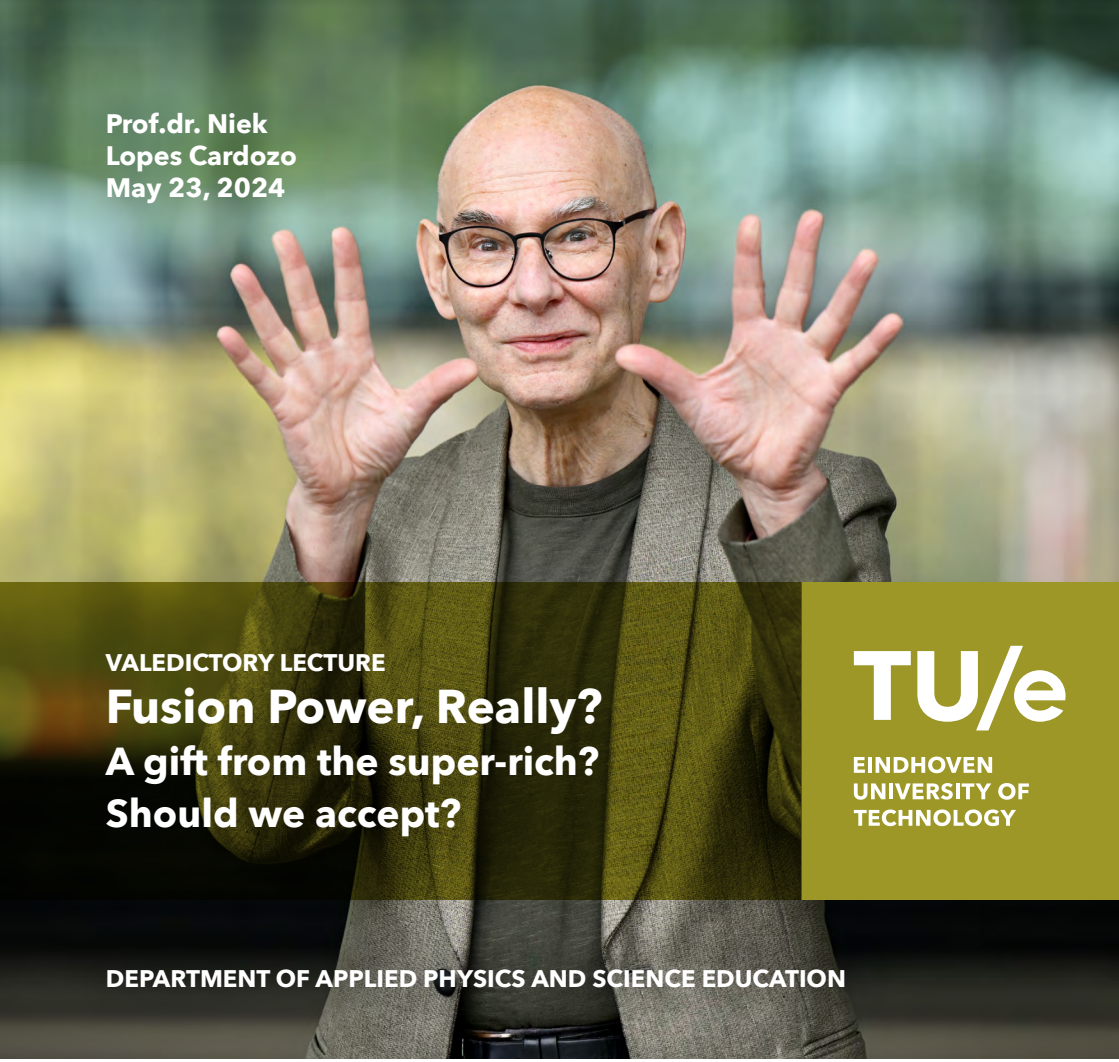

Prof.dr. Niek
Lopes Cardozo
May 23, 2024

VALEDICTORY LECTURE

Fusion Power, Really?
A gift from the super-rich?
Should we accept?

TU/e
EINDHOVEN
UNIVERSITY OF
TECHNOLOGY

DEPARTMENT OF APPLIED PHYSICS AND SCIENCE EDUCATION

INVITATION

Prof.dr. Niek Lopes Cardozo was appointed as a full professor of Science and Technology of Nuclear Fusion in the Department of Applied Physics and Science Education at Eindhoven University of Technology on January 1, 1994. He will deliver his valedictory speech on Thursday, May 23, 2024.

The Executive Board of Eindhoven University of Technology cordially invites you to attend the valedictory lecture of Prof.dr. Niek Lopes Cardozo on **Thursday, May 23, 2024, at 4.00 PM**. The public lecture will be delivered in the Blauwe Zaal of the Auditorium. You do not need to register. In case you can't attend, the valedictory lecture will also be streamed live at **https://vimeo.com/event/4159609** or can be viewed afterwards.

The title of the lecture is
'Fusion Power, Really? A gift from the super-rich? Should we accept?'

After the lecture, drinks will be served in the Senaatszaal.

All professors are invited to join in the cortège. If you would like to participate, please register in advance with the Office of Doctoral Presentations and Academic Ceremonies, phone +31 (0)40 247 37 42, email penp@tue.nl.

Silvia Lenaerts

Prof.dr. Silvia Lenaerts
Rector Magnificus

After May 23, 2024, the text of the valedictory lecture will be available online at www.tue.nl/lectures.

Prof.dr. Niek Lopes Cardozo has spent his entire career in the field of fusion energy, starting with a PhD at Utrecht University in 1985. At TU/e, he initiated the interdisciplinary MSc program Science and Technology of Nuclear Fusion in 2009. Around the same time, he initiated the European Fusion Education Network *FuseNet*. Before focusing on the training of the new generation of fusion engineers, he worked at the FOM Institute for Plasma Physics (now DIFFER), where he directed the Dutch fusion research program. In that role, he initiated the industrial network ITER-NL, set up to prepare Dutch industry for participation in the large international ITER experiment.

In parallel to his work as a researcher and educator, he has been active in science policy. Among other things, he served on the Executive Board of the Dutch Research Council (NWO), chairing the Science Domain, and before that he chaired the Foundation for Fundamental Research on Matter (FOM), the funding organization for physics research.

Climate change and the energy transition have been longtime interests and concerns. In recent years, his research has focused on the socio- and techno-economics of the energy transition and the potential role of fusion energy therein.

About the lecture
Fusion power always 30 years away? Not any longer, if you believe the dozens of startup companies that promise commercial fusion power within a decade. Now, you may not believe them, but someone else does. These companies are backed by venture capital to the tune of billions of dollars. And they are focused teams of smart, highly competent people. A few may actually succeed. But then? What does it take to scale up fusion power to a global scale? How fast can it be done? And what are the consequences in terms of the ecological footprint and the ethical production of raw materials? Upscaling, as always, comes with ethical questions. Let's talk about it.

Visiting address Auditorium, Building 1, Groene Loper, Eindhoven
Navigation address De Zaale, Eindhoven, www.tue.nl/map