INVITATION

Prof.dr.ir. Danny Ruijters was appointed part-time professor of data-driven value-based healthcare in image guided therapy at the Department of Electrical Engineering at Eindhoven University of Technology (TU/e) on June 1, 2022. He will deliver his inaugural lecture on September 8, 2023.
The Executive Board of Eindhoven University of Technology cordially invites you to attend the inaugural lecture of Prof.dr.ir. Danny Ruijters on **Friday, September 8, 2023, at 4.00 PM**. The public lecture will be delivered in the Blauwe Zaal of the Auditorium. You do not need to register.

The title of the lecture is **‘Data-driven patient treatment’**

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.

Prof.dr. Silvia Lenaerts
Rector Magnificus

After September 8, 2023, the text of the inaugural lecture will be available online at www.tue.nl/lectures.

Danny received his electrical engineering degree from the University of Technology in Aachen, Germany, in 2001. He undertook his master thesis at the École Nationale Supérieure des Télécommunications (ENST), ParisTech, Paris, France, on the topic of cortical surface extraction and separation of the hemispheres in MRI datasets by 3D segmentation. In 2010, he received a PhD degree from TU/e and the KU Leuven on the topic of multi-modal image fusion during minimally invasive treatment. He has been employed by Philips Healthcare since 2001, and has been a principal scientist at the Philips Image Guided Therapy Systems Innovation department since 2011. He has a track record here of creating prototypes for interventional patient treatment and evaluating those prototypes in a live clinical setting in hospitals around the globe, taking into account the technical, clinical and regulatory aspects, which led to more than eight product propositions. He has also supervised over 20 students, contributed to courses as a guest lecturer at TU/e and Fontys, and published over 70 articles and over 20 patents.

**About the lecture**

Two trends that have been emerging in recent years to improve the quality of medical care, while also getting a grip on the associated costs, are Evidence-based medicine and Value-based healthcare. Both trends are fueled by data. In particular, systematic and large-scale data collection during the entire patient care cycle enables better insights and consequently better and more effective care protocols. The infrastructure for such data collection has been initiated in the last decades and is still being extended. While these efforts have already improved treatment approaches, there is still a lot of untapped potential, especially considering modern data science and AI developments. This also comprises the exploration of intelligent and context-aware systems for minimally invasive patient treatment, particularly the translation of large population datasets to the individual patient and vice-versa, and the direct application during image guided therapy. Hyper-personalized patient treatment is enabled by translating insights from large data sets to individual patients, improving patient outcome and reducing costs for society, while lowering the administrative burden for clinical staff.

**Visiting address** Auditorium, Building 1, Groene Loper, Eindhoven

**Navigation address** De Zaale, Eindhoven, www.tue.nl/map