Friday 17 April 2026, 9.30 – 18.00 h

NNV National Physics Practicals Day

NNV Landelijke Natuurkunde Practicumdag (LNPD)

Applied Physics department, Eindhoven University of Technology
FLUX building, De Groene Loper 19, 5612 AP Eindhoven

A workshop on physics lab education aimed to meet fellow educators and organizers working at Universities of Applied Sciences and (Research) Universities, in the Netherlands and Belgium. A day full of contributions to share, shape and discuss directions of the physics lab education.

9.30 h	WELCOME AND REGISTRATION Central lobby of FLUX building (first floor)
10.00 h	**OPENING OF THE WORKSHOP** Erik Langereis (TU/e)
10.15 h	**Turning Atoms into Qubits = The Eindhoven Rydberg Quantum Computers** Yuri van der Werf (TU Eindhoven) *A flavour of the TU/e Applied Physics research. Studying the building blocks of a quantum computer based on individually trapped single atoms acting as qubits. How they are realized in the lab and what kind of calculations can be performed.*
11.00 h	**PARALLEL WORKSHOPS – ROUND A** **A1. CHALLENGE-BASED LEARNING (CBL)** Sharing best practises on how to incorporate inquiry-driven research assignments into physics lab education for undergraduate students. ○ **3D design skills in a project-based course for undergraduate students** Aleksandra Biegun (RU Groningen) ○ **Coherent teaching of mechanics in a theme park** Wim Bouwman (TU Delft) ○ **Control of a flexible robot: control theory as a multidisciplinary CBL course** Julian Held (TU Eindhoven) **A2. AUTOMATION & PROGRAMMING** Sneak preview into the hardware, programming and automation choices made at various physics educational labs. And how are these choices reflected in the learning goals of the institute's lab courses and skills. ○ **SensorTag** Robert Klein-Douwel (RU Groningen) ○ **M5Stack** André Eppink (RU Nijmegen) ○ **MyDAQ** Sam Lamboo & Paul Logman (UL Leiden) ○ **PYNQ boards** Sander Nijdam (TU Eindhoven)
12.30 h	**NETWORKING LUNCH**

13.30 h	**PARALLEL WORKSHOPS – ROUND B** **B1. MULTI-DISCIPLINARY EDUCATION** Sharing experiences on utilizing students' physics knowledge and practical skills, in terms of discipline and level, in multidisciplinary project-based education ○ **Multi-disciplinary CBL replacing recipe-style experiments** Somayeh Asadi (RU Groningen) ○ **Maker Lab: scientific inquiry by multi-disciplinary student cohorts using Maker tools** Forrest Bradbury (AUC Amsterdam) ○ **TU/e Innovation Space** *To be announced* (TU Eindhoven)
	B2. CURRICULUM PERSPECTIVE How to safeguard students' practical learning and their skill development? How to properly assess their (experimental) skill set? Let's share experiences and ideas ○ **Development of TA training for inquiry-based physics laboratories** Aleksandra Biegun & Robert Klein Douwel (RU Groningen) ○ **From main message to manuscript: structure and strategy for writing your report in the age of AI** Dylan van Arneman & Marnick van Willigen (VU Amsterdam) ○ **Lab curriculum revision: lessons learned** Peter van Capel (UU Utrecht) ○ *Discussion topic:* **A.I. in the lab journal / report** Christa Lankhaar (TU Eindhoven)
15.00 h	**BREAK**
15.15 h	**PARALLEL LAB TOURS** Best to close this workshop with a tour through the educational labs, finding inspiration at the experiments at display. **C1. TU/E APPLIED PHYSICS PRACTICAL SPACES** Martine Duif – van Vlokhoven (TU Eindhoven)
	C2. FONTYS APPLIED PHYSICS EDUCATIONAL LABS Inge Leermakers (Fontys Eindhoven)
16.30 h	**NETWORKING DRINKS**
18.00 h	END OF WORKSHOP