



**ERDF Seminar on the
Opportunities and development of unconventional electronics
Inauguration of the PhyLab laboratory at UniBz**

New kinds of electronics such as low-cost sensor systems, environmentally friendly components for the internet of things, or unobtrusive wearables are rapidly changing the way electronic devices are integrated into our environment, and our daily life. To unlock the potential of such new unconventional electronic systems, the *PhyLab* infrastructure project funded by the European regional development fund helped to establish a new laboratory at the Free University of Bozen-Bolzano. The new *PhyLab* laboratory, together with other laboratories at the Free University of Bozen-Bolzano, enables the development of flexible, large-area, biocompatible devices and systems based on thin-film technology, functional coatings on arbitrary substrates, and fundamental research in the areas of semiconductor and nano technology. In this context it provides a technology platform for the local fabrication of customizable thin-films and integrated electronic systems e.g. for health monitoring or sensor conditioning.

To celebrate the inauguration of the *PhyLab* laboratory, industrial and academic guest are invited to attend a seminar with local and international speakers, showcasing the opportunities of unconventional electronics, as well as the capabilities of the new *PhyLab* thin-film laboratory.

Date & Time:

Friday November 25th, 2022 8:30 - 18:15

Location:

Free University of Bozen-Bolzano

Room F6

Universitätsplatz 1 - Piazza Università, 1

39100 Bozen-Bolzano, Italy

Online participation is possible



Free registration:

[SIGN IN - Seminar on the Opportunities and development of unconventional electronics \(ungerboeck.com\)](https://www.ungerboeck.com)

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Program:

8:30 – 9:00	Welcome
9:00 – 9:30	Introduction and PhyLab ERDF project overview Niko Münzenrieder
9.30 – 9:40	Welcome by Rector Paolo Lugli, Rector, Free University Bozen-Bolzano
9:40 – 10:25	Giuseppe Cantarella University of Modena and Reggio Emilia <i>Flexible and sustainable electronics: Physics, materials and devices for a new technological paradigm</i>
10:25– 11:10	Matteo Calandra University of Trento <i>Magnetism, superconductivity and charge density waves: the surprising physics of 2D materials.</i>
Break	
11:30– 12:15	Manish Tiwari University College London, UK <i>High-resolution 3D printing and sensors for interventional healthcare applications</i>
12:15– 13:00	Denys Makarov Helmholtz-Zentrum Dresden-Rossendorf, Germany <i>Flexible and printable magnetoelectronics for human-machine interfaces and soft robotics</i>
Lunch break	
14:15 – 14:30	Domenico Scagliusi Kenosistec S.r.l. (supplier of PhyLab sputter tool) <i>Technology and applications of sputter deposition</i>
14:30 – 15:00	Luisa Petti Faculty of Science and Technology, Free University Bozen-Bolzano <i>Flexible, printed, and sustainable Electronics: Overview of current activities at the sensor system technology laboratory</i>
15:00 – 15:30	Michael Haller Faculty of Computer Science, Free University Bozen-Bolzano <i>Smart textiles in the automotive</i>
15:30 – 16:50	Short presentations <i>PhD and Postdoc projects</i> Electronic materials, devices, and systems group Free University Bozen-Bolzano
Break	
17:00 – 18:15	Lab tour