

BND School 2023

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Bergische Universität Wuppertal



Luftbild



BERGISCHE
UNIVERSITÄT
WUPPERTAL

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The Bergische Universität Wuppertal

Students **ca. 23.000**
Staff **ca. 4.000**
Professors **ca. 270**

Departments **31**
Courses **112**
Research Institutes **48**

Activities at the Bergische Universität

- Experimental Particle Physics
 - High Energy Physics (ATLAS, CALICE, EIC)
 - Astroparticle Physics (IceCube, Auger) → K.-H. Kampert
 - Hadron Physics (CBM at FAIR)
- Theoretical Particle Physics
 - Strong Lattice Gauge Group

Programm of the school

- *Quantum computing and quantum machine learning*
PD Dr. Jeannette Lorenz & Dr. Federico Meloni
- *Beyond SM physics with axions, long-lived particles and the dark sector*
Dr. Felix Kling
- *High-energy cosmic ray astrophysics*
Prof. Karl-Heinz Kampert
- *Instrumentation for gravitational wave detection*
Prof. Conor Mow-Lowry
- *Recent developments in flavour physics*
Dr. Wouter Hulsbergen
- *Higgs and EW physics including EFT interpretation*
Prof. Celine Degrande
- *Advanced (tracking) detectors*
Prof. Ingrid Gregor
- *Students project: Muon tomography*
Maxime Lagrange & Marwa Al Moussawi

The daily structure

- 09:00-10:30 - Lecture / Project
- Coffee Break
- 11:00-12:30 - Lecture / Project
- Lunch Break
- 14:00-15:30 - Lecture / Project
- Coffee Break
- 16:00-17:30 - Lecture / Project
- 18:00 – 19:30 Dinner



Technical setups for exercises

Students project:

https://github.com/MaximeLagrange/Muography_Workshop_BND_2023

- Virtual machine
- Jupyter notebook
- Madgraph 5



In case you have problems please contact us

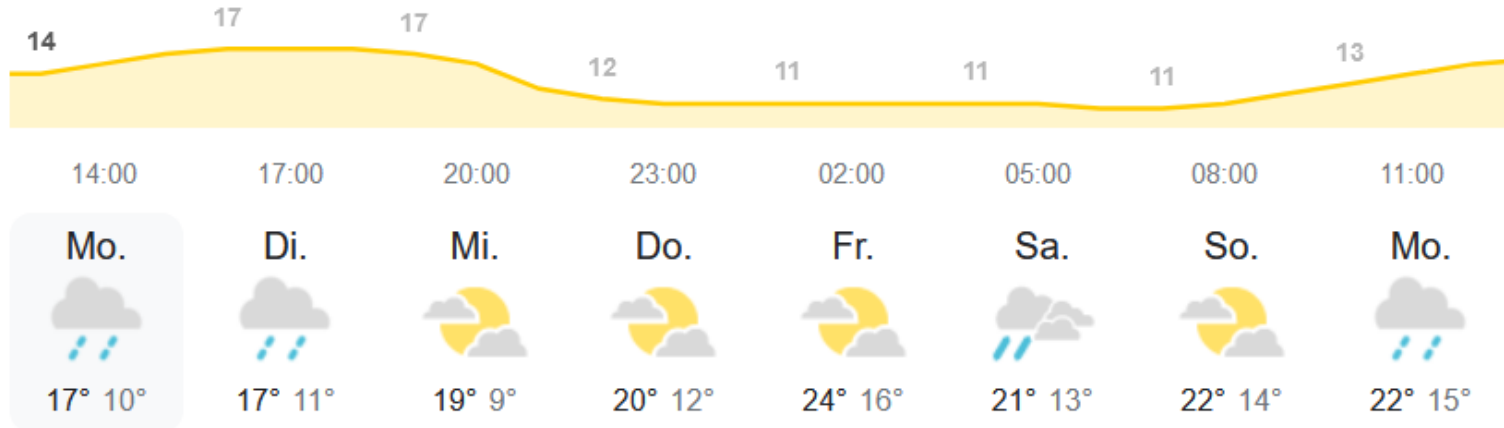
Wireless



SSID: AufDemHeiligenBerg

Password: Sommer+23

Weather forecast



[weather.com](https://www.weather.com) • Feedback geben

Temperatur | **Niederschlag** | Wind

