

Faculty of Physics

PHYSICS COLLOQUIUM

Speaker: **Prof. Joerg Jaeckel** Fakultät für Physik und Astronomie, Universität Heidelberg



Topic:Axions and ALPs: From Dark Matter Towards Discovery and Beyond

 Time and
 Tuesday, July 8, 2025, 2:50 pm – hybrid event

 place:
 The colloquium will be held in REC/C213.

 Online participation possible:
 Zoom-Meeting: Meeting-ID: 631 3817 8900 / passcode: PC-SoSe25

 https://tu-dresden.zoom-x.de/j/63138178900?pwd=TImGawPz1dtDA6VzO2N1XdqqI7bE6b.1

Host: Prof. Dominik Stöckinger

- Abstract: Dark matter is still one of the most important questions in contemporary physics. We will see that Axions and ALPs are amongst the prime candidates for this dark matter and how they can be detected. But even after an initial discovery important questions remain. Can we establish whether we have really discovered THE dark matter or just a (small) part of it? Can we use it to learn something about our large-scale cosmic environment? And the opposite direction: can we learn something about the laws of physics at the truly microscopic, fundamental level?
- *Bio:* Since 2012: Professor (W3) of Theoretical Physics, Heidelberg University (Germany) / 2007 2012: Lecturer and Reader at IPPP, Durham University (UK) / 2007 – 2008: Junior research group leader Heidelberg University (Germany) / various postdoc stays (Durham University, DESY, Heidelberg University). 2016 – 2025: Coordinator of the CERN Study Group Physics Beyond Colliders (together with Claude Vallee (until 2024), Mike Lamont (until 2020), Gianluigi Arduini (since 2020) and Gunar Schnell (since 2024)), 2016 – 2020: Principal Investigator of the Heidelberg node of the EU supported ITN Elusives, 2016 – 2018: Dean of Studies, Department of Physics and Astronomy, Heidelberg University (Germany).

