Prof. Dr. I. Sodemann Prof. Dr. K. Taute

## Physics Colloquium

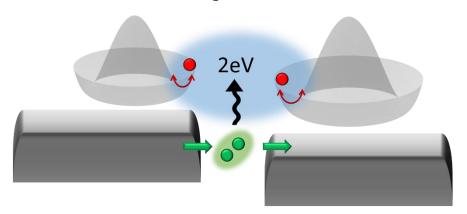
Tuesday, 21 January 2025 at 16:30

## Prof. Dr. Björn Trauzettel

University Würzburg

## Dynamics of biased Josephson junctions

Josephson junctions are biased in three distinct ways: phase bias, voltage bias, and current bias. Phase bias yields an equilibrium supercurrent but is hardly realized in the laboratory. Voltage bias or current bias describe instead non-equilibrium transport characteristics of Josephson junctions. Both biasing schemes are characterized by rich phase dynamics. In this talk, I carefully describe the phase dynamics of biased Josephson junctions. It is difficult to treat theoretically because of retardation effects but highly relevant to interpret typical experimental measurements of current-voltage characteristics.



Host: Prof. Dr. Bernd Rosenow

Venue: Universität Leipzig, Faculty of Physics and Earth Sciences 04103 Leipzig, Linnéstraße 5, Small Lecture Hall

Everyone is welcome to a reception with coffee, drinks and cookies in the Aula following the talk.

For an up-to-date semester program, sign-up for the physics colloquium mailing list, and subscription to the digital calendars in CalDAV format, head to the colloquiums web page <a href="https://www.physes.uni-leipzig.de/fakultaet/veranstaltungen">https://www.physes.uni-leipzig.de/fakultaet/veranstaltungen</a>.