



Prof. Dr. J. Deiglmayr Prof. Dr. I. Sodemann

Physics Colloquium

Tuesday, 16 Jan 2024 at 16:30

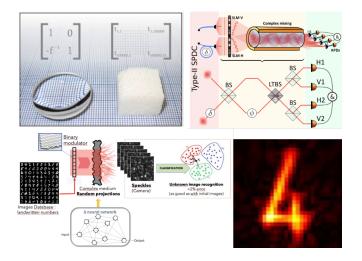
Prof. Dr. Sylvain Gigan

Laboratoire Kastler-Brossel, Ecole Normale Supérieure, Paris, France

Optical Imaging and Computing with Disorder

Coherent light transport through disordered media gives rise to the well known speckle pattern. This pattern can be understood as the result of of a complex mixing of the incident coherent light through linear elastic multiple scattering, *i.e.* the propagation can be described by a transmission matrix, linking input to output modes.

I will show how the knowledge of the transmission matrix allows imaging through complex media, and how we can extend these concepts in the realms of computational imaging and even optical computing.



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

After the lecture, everyone is invited to continue discussions in the Aula with Coffee and Cookies.

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 <u>https://www.physes.uni-leipzig.de/fakultaet/veranstaltungen</u>.

