

CONDENSED MATTER PHYSICS SPECIAL SEMINAR

Thursday 10 October at 14:30

Simpkins Lee seminar room

'Effect of anharmonicity on optoelectronic properties of semiconductors'

Professor David Egger
Technical University of Munich

In my talk I will focus on structural dynamical effects and anharmonicity in semiconductors, which raise puzzling questions for the design and conceptual understanding of these materials. These effects also motivate exciting directions of theoretical method developments for predicting material properties in disordered systems. I will present our recent findings on theoretical approaches for calculating structural dynamics in semiconductors, particularly halide perovskites and nitrides, and their influence on finite-temperature optoelectronic properties, including band gaps and carrier mobilities.

Host: Prof Laura Herz