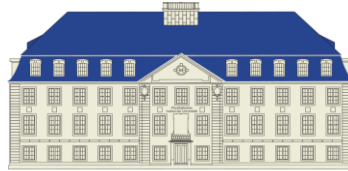




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COLLOQUIUM „OPTICS AND CONDENSED MATTER“

Robert P. Cameron and Duncan McArthur

University of Strathclyde, United Kingdom

Chiral optical force inspired by a sea creature

Interest has been growing in recent years in the possibility of an optical force that discriminates between the mirror images forms of a handed or “chiral” molecule. Such a force could find use in a wealth of applications ranging from drug discovery to tests of fundamental physics, however the chiral optical forces proposed explicitly to date for small chiral molecules are extremely *feeble* as they rely on weak magnetic dipole and electric quadrupole interactions. In our talk, we will explain how a remarkable sea creature led us recently to a *robust* chiral optical force for small chiral molecules, based instead on strong electric dipole interactions.

June 11th, starting with discussion at 17:00 h, talk at 17:15 h, live IAP lecture hall or via Zoom

<https://uni-bonn.zoom.us/j/98441612025?pwd=a01SSjlkY1Q3SDFhL09JQk1qc1V6dz09>

Meeting-ID: 984 4161 2025

Kenncode: 294164