Seminar/Talk

A Dissipative Model of Chiral Induced Spin Selectivity

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Host:

Current research on electronic transport properties of chiral molecules [such as DNA] leads to many exciting and unexpected results, which are important in physics, biology, and chemistry. About a decade ago, it was observed that transport properties of left-handed molecules are very different from those of right-handed molecules. It looks like chiral molecules act as small magnets, and the origin of these magnet-like properties is still a subject of a debate. Resolving this debate may lead to novel devices in spintronics, better understanding of biological processes, and a new possibility to separate enantiomers.In this talk, we present a theoretical model to study electronic transport properties of chiral molecules. The model focuses on the motion of an electron; the molecule is modeled as a dissipative medium. Transport properties of chiral molecules that follow from our simple model are in agreement with the existing experimental data.

Monday, March 8, 2021 02:00pm - 03:00pm
Online Event ()

This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.
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