

Nanospintronics using molecular nanomagnets

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This presentation will address the field of Molecular Electronics and Spintronics, which are both rapidly emerging fields of Nanoelectronics with a strong potential impact for the realization of new functions and devices helpful for information storage as well as quantum information. Our project aims at the merging of the two fields by the realization of molecular junctions that involves magnetic molecules. We first show the unique chemical and physical properties of molecular nanomagnets and then present three basic molecular devices of our group that demonstrate the state of the art in molecular spintronics.