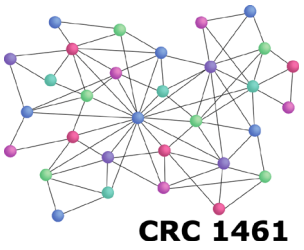

Nanoscale Self-assembly and Electrical Function

Marc Tornow *(Molecular Electronics, TU Munich, Germany)*

Self-assembled nanostructures are of large importance in chemistry and biology. Their construction principles may become significant for the future bottom-up fabrication of three-dimensional electronic architectures. I will review our recent investigations on the electronic charge transport in various nanoscale self-assemblies. These range from distinct mechanisms for quantum tunneling in molecular monolayers to memristive switching phenomena in specifically assembled, heterogeneous nanoparticle dimers.

CRC 1461: Neurotronics
Colloquium: 21-Jan-28_001
Thursday, 4 pm to 5 pm (CET)

Invited by Franz Faupel and Hermann Kohlstedt
Kiel University, Germany