

The 251st MANA Special Seminar



Bridging the Interface: Observing and designing molecular magnetism Chair: Dr. Tomonobu Nakayama (MANA PI)

Prof. Germar Hoffmann

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The last two decades saw a vital development into the field of nanomagnetism: The research in physics and device fabrication significantly progressed in terms of experimental techniques, theoretical understanding, and design of magnetic nanoparticles. However, the question remains on how to reliably fabricate new kind of devices for future applications. Parallel to the development in technically oriented disciplines, molecular magnetism emerged from chemistry. Molecular magnetism offers new routes for the development of multi-functional materials for the precise control of spin states. However, experimental access is limited to precisely understand physical mechanisms within such complex multi-functional systems.

In my talk, I will present latest results from my research crossing the border between classical chemistry and fundamental physics. Resolved by scanning tunneling microscopy, the behavior of static and dynamic molecular spin systems of synthesized and artificial molecules are addressed in spin-polarized tunneling and electron spectroscopy and implications for device fabrication and novel devices will be discussed.

Venue: Seminar Room #431, 4F, MANA Bldg.,

Date: March 5th, Monday Time: 13:30-14:15

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