

7 de JULIO de 2021

12.00 h
Zoom

• **INMA** **Junior**

2D metal-organic networks: electronic and topological properties

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Scanning Tunneling Microscopies (STM) allow the characterization of on surface structures such as single atoms or two-dimensional metal-organic networks. In particular, we can obtain high resolution images through the STM tip functionalization or access the electronic structure of single atoms deposited on a surface.

In this seminar, we present a specific two-dimensional metal-organic network. By means of STM techniques, we demonstrate experimentally that despite previous theoretical calculations, this network cannot host topologically nontrivial edge states.

Protein-particle interaction: the importance of protein structure

Ilaria Armenia
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Iron oxide nanoparticles are attractive materials for enzyme immobilization and, thanks to their superparamagnetism, can be activated by remote stimuli. This can be exploited to activate molecules that are not remotely actuable. Different conjugation strategies and thus, different orientations of the enzyme, allow obtaining immobilized molecules with different catalytic efficiency. Therefore, it is important to know the protein structure to understand the protein-particle interaction. Protein Imager can help us, as a free online tool for visualizing protein and biomolecule structures in a rapid and user-friendly way.

