

# LMA WEBINARS 2020

## NEW SPM TECHNIQUES IN THE LMA PORTFOLIO: PIEZORESPONSE MICROSCOPY, NON-CONTACT AFM AND MOLECULAR NANOPROBE

One of the strategic guidelines of the SPM area at LMA is to make available to the scientific community singular STM and AFM techniques: spin-polarized STM, atomic manipulation or force spectroscopy in liquid media are just a few examples. Attending to the evolution of the research trends and topics of interests in both the local and the international scene, we have developed new advanced techniques. In this talk I will address the basic principles and the implementation progress of Piezoelectric Force Microscopy, as well as other novel SPM approaches to explore electric polarization of surfaces down to the atomic scale. This will be connected with the recent development of bond-resolving AFM imaging. Finally, the Molecular Nanoprobe technique to study ballistic transport in objects with dimensions between 1 and 10 nm will be briefly discussed.

### SPEAKER

David Serrate

Dr. Serrate obtained his PhD degree by the University of Zaragoza in 2005. Afterwards he was Marie Curie fellow until 2009 in the group of Prof. Wiesendanger at University of Hamburg. In 2010 he joined again University of Zaragoza as Ramón y Cajal Researcher, where he built the SPM laboratories of the LMA. Since 2018 he is tenured scientist at INMA (CSIC-Unizar) and director of the SPM area.

We invite you to attend this webinar

MAY 21, 2021, 12:00

ZOOM WEBINAR: [HTTPS://BIT.LY/3WGLKEL](https://bit.ly/3WGLKEL)



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