

Departamento de Física de la Materia Condensada

**Universidad** Zaragoza

### **SEMINARIOS 2023**

## Celia Rogero Centro de Física de Materiales, CSIC-UPV/EHU (San Sebastián) Atomically precise devices:

# the challenge of nanofabrication

We apply the synthesis of atomically perfect materials to practical problems of technological and industrial interest. Thus, we are consolidating a methodology based not only in the bottom-up fabrication, but also the understanding from the atomic scale interactions up to the mesoscopic behavior of hybrid or complex systems. One example is the combination of Ferromagnetic Insulators/Superconductor heterostructures that are being explored as new platform for future quantum developments. In this context, a new family of 2D magnetic materials, the Transition Metal di-Halides TMDH2 exhibit promising magnetic and electronic properties.

Dr.Celia Rogero is Tenured Researcher of CSIC and Vice-president of the Spanish Vacuum Society (ASEVA) She got her PhD from UAM in 2003. From 2004 to 2009 she was postdoctoral researcher at the Department of Chemistry of the University of Newcastle upon Tyne and Astrobiology Center in Madrid, CAB (INTA-CSIC). She is expert in the study of physico-chemical properties of metal-semiconductor (insulator) interfaces. Her actual main research line, as leader of the Materials for Quantum Technologies Group, is the bottom-up fabrication with atomic precision of devices, specially that involving ferromagnetic semiconductors and superconductors.

Con la colaboración de:

Facultad de Ciencias Universidad Zaragoza

## **10 Marzo (viernes)**

HORA: 12:30

SALA DE GRADOS



#### **FACULTAD DE CIENCIAS**