INC YOUNG RESEARCHERS MEETING

(La Cristalera, Miraflores de la Sierra, December 15th, 2023)

9:30 – 9:45 Welcoming session

9:45 – 10:15 Session I (Chair: Fabrice Leardini)

9:45-10:15 *Invited speaker*: Elsa Prada, “Searching for Majorana bound states in superconductor-semiconductor nanostructures”, ICMM-CSIC.

10:15 – 11:10 “Chema Gómez-Rodríguez” awards to the best paper

10:20-10:45 Juan Luengo Márquez, “Force-dependent elasticity of nucleic acids”

10:45-11:10 Nuria Jiménez Arévalo, “MoS2 photoelectrodes for hydrogen production: tuning the S-vacancy content in highly homogeneous ultrathin nanocrystals “

11:10 – 11:20 Entrega de los 12 premios a estudiantes de Física

11:20 – 12:20 Pausa Café + Sesión de Posters

12:20 – 13:40 Session II (Chair: Emma Martín)

12:20 Leyre Aldaz Caballero, “Bringing together lanthanide and chromium ions for brighter emission”

12:40 Manuel Fernández López, "Emergent spinons in the Weyl-Mott metal-insulator transition "

13:00 David Palma, "Wide band gap Cu2ZnGe(S,Se)4 thin-film semi-transparent solar cells"

13:20 Ángel Ibabe, “Joule heating effects in superconducting InAs nanowire islands"

13:40 – 15:00 Lunch

15:00 – 16:00 Session III (Chair: Salvatore Assenza)

15:00 María Jesús Rodriguez Espinosa, "Mechanical disassembly of human picobirnavirus like particles indicates that cargo retention is tuned by the RNA–coat protein interaction"

15:20 Javier Fernández Martínez, "Strain effects and quasi-particle conversion in monolayer MoS2 deposited on chains of metallic nanoparticles"

15:40 Miguel Ángel Martínez García, "Coherent electron-vibron interactions in surface-enhanced Raman scattering (SERS)"

16:00 – 17:00 Pausa Café + Sesión de Posters

17:00 – 18:00 Session IV (Chair: Diego Cano)

17:00 Fengchan Zhang, "A stable ratiometric thermo-induced fluorochromatic probe for temperature sensing in living cells"

17:20 Jaime Abad, "Spontaneous symmetry breaking in diffraction"

17:40 Miguel Cantero, “Mechanical tomography of an archaeal lemon-shaped virus reveals membrane-like fluidity of the capsid and liquid nucleoprotein cargo"

18:00 Wrap up and closing