

INC YOUNG RESEARCHERS MEETING

(La Cristalera, Miraflores de la Sierra, December 17th, 2021)

13:00 – 14:30 Poster Session

List of posters:

1. **Fernández-Lomana Gómez-Guillamón, Marta:** Tunneling spectroscopy at very high magnetic fields in the iron based superconductor KFe_2As_2
2. **Moreno, Jose Antonio:** Scanning AC Josephson Spectroscopy
3. **Ramírez González, Juan Pedro:** Phase behavior of hard circular arcs: purely entropy-driven cluster phases
4. **Balduque Picazo, José:** Interference induced thermoelectric response of ballistic conductors
5. **Al Shuhaib, Jinan Hussein:** Synthesis, crystal structure, band gap energy and Seebeck coefficient of trigonal $Sr_{x+1}TiS_{3-y}$ chalcogenide perovskites
6. **Muñoz Ortiz, Tamara:** Gold nanoshells for molecular imaging of inflammation by Optical Coherence Tomography
7. **Fernández Martínez, Javier:** Manipulating coherence and directionality of rare earth quantum emitters by plasmonic chains
8. **López Nebreda, Rubén:** Simultaneous measurement of conductance and thermopower using STM and multifrequency detection
9. **Martín Pérez, Lucía:** Liquid-phase exfoliation of magnetic van der Waals crystals and its role in the synthesis of 2D-2D covalent heterostructures
10. **Casal, Ignacio:** Implementation of high frequency techniques for measuring hybrid superconductor-semiconductor devices
11. **Exposito, Diego:** Development of a true variable temperature gateable-STM/AFM in LT-UHV conditions to probe 2D materials
12. **García, Pablo:** Reduced size STM in high magnetic fields
13. **Strobl, Klara:** Electromechanical photophysics of individual P22 protein cages loaded with GFP
14. **Cantero, Miguel:** Probing the structural stability of SARS-CoV-2 surrogate TGEV under stringent environmental conditions
15. **Hernández del Valle, Miguel:** A coarse-grained approach to model the dynamics of the actomyosin cortex
16. **Camarero, Pablo:** Laser Irradiation in spheroids MCF-7 and U-87
17. **Ramírez, M^a Jesús:** Preparation of thin film $LiCoO_2$ cathodes by pulsed laser deposition for Li-ion batteries
18. **Díaz Escribano, Samuel:** Proximity effects and topological superconductivity dependency on layer thickness in superconductor/ferromagnetic/semiconductor hybrid devices
19. **Viñals, Silvia:** Characterization of the external pulsed beam at CMAM for proton-therapy studies at the FLASH regime
20. **Rodríguez Espinosa, M^a Jesús:** Unraveling the structure of RNA-packed within Penicillium Chrysogenum Virus and its influence in the mechanical stability

21. **Campusano, Richard:** Bacillus Subtilis swimming motility in liquid broth and structured media
22. **Gómez, Mario:** The Josephson effect in full-shell Al-InAs nanowires in the Little-Parks regime
23. **Vivas Viaña, Alejandro:** Unconventional mechanism of virtual-state population through dissipation
24. **Lu, Dasheng:** Improving stability and thermal sensitivity of an optically trapped upconversion nanoparticle by coating with a thermo-sensitive polymer
25. **Díaz Sánchez, Jesús:** Electronic characterization of LiCoO₂ thin films in the overlithiation regime by XPS and ARPES
26. **Caso, Diego:** Excitation and propagation of edge spin waves in ferromagnetic triangles
27. **Álamo Vargas, Pablo:** Luminescence of GaP_{1-x}N_x layers grown on nominally (001) oriented Si substrates
28. **Guo, Haojie:** Unraveling the highly complex nature of antimony on Pt(111)
29. **García Esteban, Juan José:** Deep Learning for the Modeling and Inverse Design of Radiative Heat Transfer
30. **Águeda Velasco, Miguel:** Superconducting gap and magnetoresistance of layered AuSn₄
31. **Hurtado Gallego, Juan:** Quantum Interference in Radical and Neutral Single-Molecule Junctions
32. **Singh, Raghendra:** Irradiation of Bi-Sb crystals for possible subsurface amorphization
33. **Salazar Beitia, Iñigo:** GaSe and carbon nanotubes for Li-ion batteries
34. **Li, Hao:** Strongly anisotropic strain-tunability of excitons in exfoliated ZrSe₃
35. **de la Peña Ruiz, Sebastián:** Theory of drift-enabled control in nonlocal magnon transport
36. **Arranz Jiménez, Marcos:** Photovoltaic effects study on hybrid perovskites thin layers
37. **Lasso, Alejandro:** Density Functional Theory and Machine Learning techniques for the study of amorphous materials
38. **Fernández Alonso, Francisco Javier:** Deposition of impedimetric electrodes on steel for the development of embedded sensors
39. **Galante, Clara:** Machine Learning in Nonlinear Dynamic Systems
40. **Lizarraga Lallana, Juan:** Polariton condensation in semiconductor microcavity pillars
41. **Luengo-Márquez, Juan:** Force-dependent mechanical properties of nucleic acids from fluctuations
42. **Mangriya, Paula:** Confined motion of active rotating particles within lipid vesicles
43. **Tinao, Berta:** Artificial Vesicle Fusion: from Fundamentals to Applications
44. **Esteve-Paredes, Juan José:** Light-matter interaction from density functional theory with application to attosecond electron dynamics
45. **Geva, Galor:** Assessing the predictive ability of the effective temperature in a driven colloidal suspension
46. **Manzanares Negro, Yolanda:** Controlling toughness of MoS₂ single layers by introducing atomic vacancies
47. **Salagre, Elena:** Surface Evolution in epitaxial Li_xCoO₂ films studied by LEEM/PEEM for $x \leq 1$
48. **García Blázquez, Antonio:** Projective representations from non-symmorphic space groups and spin-orbit coupling: how and why
49. **Ibabe Aviles, Angel:** Transport and heating effects in proximitized InAs nanowire islands