

LISTADO DE PROYECTOS DE TESIS

PROYECTOS PROGRAMA "ASTROFÍSICOS RESIDENTES 2023"		
ESPECIALIDAD DE INVESTIGACION ASTROFISICA		
Nº	DIRECTOR/CO-DIRECTOR/TUTOR	TITULO PROYECTO
COSMOLOGY AND ASTROPARTICLES – COSMOLOGÍA Y ASTROPARTÍCULAS (DIRECTORES: DRA. MÓNICA VÁZQUEZ Y DR J. ALBERTO RUBIÑO)		
1	Directora: Dra. Josefa Becerra González Co-Director: Dr. José A. Acosta Pulido	"Exploring the extreme extragalactic gamma-ray sky through relativistic jets"
2	Director: Dr. Jorge Martín Camalich Co-Directora: Dra. Arianna Di Cintio	"Tracing the properties of dark matter with stars at the centre of low-mass Halos"
3	Director: Dr. Juan Cortina Blanco Co-Directora: Dra. Alicia López Oramas Tutor: Prof. Ramón García López	"Ultrahigh angular resolution at Roque de los Muchachos: studying the shape of stars and their surroundings"
4	Directora: Dra. Alicia López Oramas Co-Director: Dr. Juan Cortina Blanco Tutor: Prof. Ramón García López	"Unveiling the Galactic very-high-energy gamma-ray sky"
5	Director: Dr. José Alberto Rubiño Martín Co-Director: Dr. Carlos H. López Carballo	"Characterizing the synchrotron emission from our Galaxy: clearing the path to inflation's B-modes and cosmological spectral distortions"
6	Director: Dr. Andrés Balanguera-Antolínez Co-Directora: Dra. Ginevra Favole Tutor: Dr. J. Alberto Rubiño Martín	"Simulating the Large Scale Structure of the Universe" PROYECTO NO DISPONIBLE
7	Director: Dra. Ginevra Favole Co-Director: Prof. Francisco-Shu Kitaura Joyanes Tutor: Dr. Marc Huertas-Company	"Effective decontamination of the lensing signal in multi-tracer surveys"
8	Director: Dr. Ricardo T. Génova Santos Co-Director: Dr. Michael Peel	"Understanding the nature of Galactic Anomalous Microwave Emission and its role as a CMB contaminant"
9	Director: Dr. Francisco-Shu Kitaura Co-Director: Dr. Claudio Dalla Vecchia	"Constrained cosmological simulations"
GALAXIES FORMATION AND EVOLUTION – FORMACIÓN Y EVOLUCIÓN DE GALAXIAS (DIRECTORES: DRA. CRISTINA RAMOS ALMEIDA Y DR. JAIRO MÉNDEZ-ABREU)		
10	Director: Dr. Ignacio Trujillo Cabrera Co-directora: Dra. Mireia Montes Quiles	"The Universe at low surface brightness"
11	Director: Dr. Johan H. Knapen Co-Director: Dr. Sébastien Comerón Tutor: Sebastián Comerón	"Probing the circumnuclear medium in AGN and starbursts at scales smaller than 100 pc"

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12	Director: Dr. Sébastien Comerón Tutor: Dr. Johan H. Knapen	"The evolution of thick discs seen in deep HST and JWST imaging"
13	Director: Dr. Chris Brook Co-Director: Dra. Arianna Di Cintio Tutor: Dr. Marc Huertas-Company	"Unveiling dwarf galaxies dark matter properties using Machine Learning Techniques"
14	Director: Dr. Jairo Méndez-Abreu Co-Directora: Dra. Adriana de Lorenzo-Cáceres Rodríguez	"Building the Giants: How does our Universe form Milky Way-like galaxies?"
15	Director y Tutor: Dr. Helmut Dannerbauer	"Shedding light on the evolution of galaxies at various environments in the early universe"
16	Directora y Tutora: Dra. Almudena Prieto	"The high-energies spectrum of Supermassive Black Holes"
17	Directores: Prof. John E. Beckman Co-Directora: Dra. Almudena Prieto Tutora: Dra. Almudena Prieto	"Forming stars next to Super Massive Black Holes in the near and far Universe"
18	Directora: Dra. Cristina Ramos Almeida Co-Director: Dr. José A. Acosta Pulido	"A high angular resolution study of quasar-driven outflows"
19	Director: Dr. Jorge Sánchez Almeida Co-Directora: Dra. Mar Mezcuca	"Discovery and characterization of Intermediate Mass Black Holes"
20	Directora: Dra. Casiana Muñoz Tuñón Co-Director: Dr. Jairo Méndez-Abreu	"Star Formation Near and Far: A case for high-spectral resolution Spectroscopy"
21	Directora: Dra. Begoña García Lorenzo Co-Directora: Dra. Cristina Ramos Almeida	"Morpho-kinematic imprints of AGN triggering and feedback"
22	Directora: Dra. Adriana de Lorenzo-Cáceres Rguez. Co-Directora: Dra. Begoña Garcia Lorenzo Tutora: Dra. Cristina Ramos Almeida	"The elusive art of feeding discrete supermassive black holes"
23	Director: Dr. Alexander Vazdekis Co-Directora: Dra. Anna Ferré Mateu	"Are massive galaxies truly dead? Constraints from the unexplored UV window"
24	Director: Dr. Ignacio Martín Navarro Co-Director: Dr. Marc Huertas Company Tutor: Dr. Jesús Falcón-Barroso	"Dissecting the formation histories of galaxies"
25	Director: Dr. Marc Huertas-Company Co-Director: Dr. Johan Knapen	"Unveiling the structural transformations of galaxies in the era of Euclid and JWST with Artificial Intelligence"
26	Director: Dra. Casiana Muñoz Tuñón Co-Director: Dr. Jorge Sánchez Almeida	"Identifying cosmological gas fuelling star-formation through machine learning techniques"

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27	Director: Dr. Jordi Cepa Nogué Co-Directores: Dra. Carmen P. Padilla Torres y Dr. José Ignacio Glez	"Red QSOs in the Lockman-SpReSO survey"
STELLAR AND INTERSTELLA PHYSICS – FÍSICA ESTELAR E INTERESTELAR (DIRECTORES: DR. SERGIO SIMÓN DÍAZ Y DRA. SAVITA MATHUR)		
28	Directora: Dra. Montserrat Armas Padilla Co-Director y Tutor: Dr. Teo Muñoz-Darias	"A complete view of low-luminosity accretion in black holes and neutron stars"
29	Director: Prof. Artemio Herrero Davó Co-Director: Dra. Sara Rguez. Berlanas	"Life channels and fate of the most massive stars"
30	Director: Dr. Arturo Manchado Torres Co-Directora: Dra. Eva Villaver Sobrino	"The contribution of molecular hydrogen to the baryonic matter of the universe"
31	Director: Dr. César Esteban López Co-Director: Dr. Jorge García Rojas	"Internal and global properties of local star-forming nebulae (HII regions)"
32	Directora y Tutora: Dra. Savita Mathur	"Asteroseismic modelling of solar-like stars from the main sequence to red giants: precise age constraints for galactic-archeology"
33	Director: Dr. Sergio Simón Díaz Co-Director: Dr. Yeisson Osorio	"Improving the reliability of surface abundance determinations in OB stars"
EXOPLANETARY SYSTEMS AND SOLAR SYSTEM (DIRECTORES: DRA. JULIA DE LEÓN Y DR. ROI ALONSO)		
34	Director y Tutor: Dr. Jonay I. Glez. Hdez. Co-Director: Dr. Alejandro Suárez Mascareño	"Stellar magnetic activity and rocky planets in cool dwarf stars with NIRPS"
35	Director: Dr. Hans Deeg Co-Director: Dr. Hannu Parviainen	"Populations of Extrasolar Planet Systems"
36	Director y Tutor: Dr. Enric Pallé	"Searching and characterizing earth-like planets with TESS+CHEOPS and CARMENES+ESPRESSO"
SOLAR PHYSICS – FÍSICA SOLAR (DIRECTORES: DR. ANDRÉS ASENSIO RAMOS Y DR. IÑIGO ARREGUI)		
37	Directora: Dra. Elena Khomenko Shchukina Co-director: Dr. Tobías Felipe García	"Non-ideal effects of partial ionization in solar waves and vortices"
38	Directora: Dra. Elena Khomenko Shchukina Co-Director: Nikola Vitas	"Waves and Shocks: The non-equilibrium multi-fluid view of the solar Chromosphere"
39	Director: Dr. Tobías Felipe García Co-Director: Dr. Christoph Kuckein Tutor: Dr. Manuel Collados Vera	"On the nature of solar magnetic bright points"
40	Director: Dr. Javier Trujillo Bueno Co-Director: Dr. Ernest Alsina Ballester	"Deciphering the magnetism of the solar chromosphere with spectropolarimetry"

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MILKY WAY AND LOCAL GROUP – VÍA LÁCTEA Y EL GRUPO LOCAL (DIRECTORES: DRA. GIUSEPPINA BATTAGLIA Y DR. MATTEO MONELLI)		
41	Director: Dr. David Sánchez Aguado Co-Director y Tutor: Dr. Jonay I. Glez. Hdez.	"Revealing the Early Galaxy: search and characterization of the most primitive stars"
42	Director: Dr. Carlos Allende Prieto Co-Director: Dr. David Sánchez Aguado	"Understanding the formation of the Milky Way with DESI"
43	Director: Dr. Guillaume Thomas Co-Directora y Tutora: Dra. Giuseppina Battaglia	"Probing the distribution of dark matter in the Milky Way galaxy and its sub-systems with stellar streams and their progenitors"
44	Directora: Dra. Giuseppina Battaglia Co-Directores: Dr. Guillaume Thomas	"The accretion history of the Milky Way stellar halo"
45	Directora: Dra. Emma Fernández-Alvar Co-Directora: Dr. Carlos Allende Prieto Tutor: Dr. Carlos Allende Prieto	"Exploring the disc-halo transition with WEAVE"

PROYECTOS PROGRAMA "ASTROFÍSICOS RESIDENTES 2023"		
ESPECIALIDAD DE INSTRUMENTACIÓN		
Nº	DIRECTOR/CO-DIRECTOR/TUTOR	TITULO PROYECTO
1	Director: Dr. Roberto López López	"COLIAO Definición Estudio y Desarrollo de un Coronógrafo con AO y LI. Estudio y desarrollo de la adaptación de un instrumento a un sistema de AO"
2	Director: Dr. José Javier Díaz García Co-Director: Dr. Hugo García Vázquez	"Development of photonic and electronic integrated circuits for applications in astrophysical instrumentation"