

ANEXO VII
LISTADO DE PROYECTOS DE TESIS

| PROYECTOS PROGRAMA "ASTROFÍSICOS RESIDENTES 2026" ESPECIALIDAD DE INVESTIGACIÓN ASTROFÍSICA | | | |
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| N.º | DIRECTOR/CODIRECTOR/TUTOR | TÍTULO PROYECTO | CONVOCATORIAS |
| COSMOLOGY AND ASTROPARTICLES – COSMOLOGÍA Y ASTROPARTÍCULAS | | | |
| 276 | Carlos Hernández Monteagudo (T) / José Alberto Rubiño Martín | Cross-correlation science in the epoch of emerging surveys of the Large Scale Structure (LSS) and the Cosmic Microwave Background (CMB). | La Caixa,FPI,FPI-SO,ARsResearch |
| 256 | Javier de Miguel Hernández / Jorge Sánchez Almeida T: Claudio Dalla Vecchia | Constraining the nature of dark matter from the distribution of starlight in dwarf galaxies | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 272 | Jorge Martín Camalich (T) / Carlos Hernández Monteagudo | Unveiling the nature of Radio Synchrotron Background (RSB) | La Caixa,FPI,FPI-SO,ARsResearch |
| 266 | José Alberto Rubiño Martín (T) / Ricardo T. Génova Santos | Advancing CMB Cosmology through Precise Characterization of Galactic Foregrounds and the Radio Synchrotron Background | La Caixa,FPI-SO,ARsResearch |
| 227 | Martín López Corredoira (T) | Challenges to standard cosmology in the light of James Webb Space Telescope high-z galaxies | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 368 | Ginevra Favole / Francisco Kitaura T: Marc Huertas Company | Forward Modeling the Nonlinear Universe: From Galaxy–Halo Physics to Precision Cosmology | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| GALAXY FORMATION AND EVOLUTION – FORMACIÓN Y EVOLUCIÓN DE GALAXIAS | | | |
| 261/263 | Alexandre Vazdekis / Ignacio Martín Navarro T: Elham Eftekhari | TIRMA/WEAVELIB: Next-Generation Stellar Libraries for High-Resolution and Near-Infrared Galaxy Astrophysics | La Caixa,ARsResearch |
| 280 | Anelise Audibert / Cristina Ramos Almeida (T) | A multi-phase view of AGN feeding and feedback in nearby quasars | La Caixa,FPI,FPI-SO,ARsResearch |

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| 269 | Arianna Di Cintio / Chris Brook (T) | The role of AGN feedback in dwarf galaxies with the new NIVARIA Local Group simulations | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 274 | Begoña García Lorenzo (T) / Francesca Pinna | Zooming in and out: the evolutionary connection between galactic nuclei at small scale and the global galaxy at larger scale | La Caixa,ARsResearch,Other |
| 226 | Carmen P. Padilla Torres (T) / Jordi Cepa Nogué | Evolution of the lowest mass galaxies and LIRG galaxies at intermediate redshifts | La Caixa,FPI,FPI-SO,ARsResearch |
| 251 | Casiana Muñoz Tuñón (T) / José Alfonso López Aguerra | Star Formation Feedback as a Key Component of Cosmological Research | La Caixa,ARsResearch |
| 281 | Claudio Dalla Vecchia (T) / Andrés Asensio Ramos | The evolution of black holes and galaxies in the first billion years | La Caixa,FPI-SO,ARsResearch |
| 260 | Cristina Ramos Almeida (T) / José A. Acosta Pulido | Searching for direct evidence of positive and negative quasar feedback using Keck and JWST observations | La Caixa,FPI-SO,ARsResearch,Other |
| 268 | Helmut Dannerbauer (T) / José Manuel Pérez Martínez | Unveiling the Early Universe: A Comprehensive Study of Galaxy Protoclusters | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 270 | Francesca Pinna (T) / Christopher Brook | Uncovering the first stages of galaxy evolution: the formation of thick disks in a cosmological context | La Caixa,ARsResearch,Other |
| 258 | Ignacio Martín Navarro / Michael Beasley T: Alexandre Vazdekis | Stellar population-based cosmology | La Caixa,ARsResearch |
| 230 | Ignacio Trujillo Cabrera (T) | Mapping Dark Matter with Light: A Novel Imaging-Only Method using Galaxy Edges | La Caixa,FPI,FPI-SO,ARsResearch |
| 252 | Jairo Méndez Abreu (T) / Adriana de Lorenzo-Cáceres Rodríguez | Deconstructing Galaxies in Space and Time | La Caixa,FPI,FPI-SO,ARsResearch |
| 245 | Jesús Falcón Barroso / Isabel Pérez Martín / Anne Marie Weijmans T: Ignacio Martín Navarro | Unveiling the dark side of galaxies with the WEAVE-Apertif & CAVITY surveys | La Caixa,FPI,FPI-SO,ARsResearch |
| 253 | John Beckman / Alejandro Serrano Vorlaff T: Sébastien Comerón Limbourg | The evolution of galaxy disc brightness profiles: from local to intermediate and high redshift galaxies | ARsResearch |

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| 248 | José Alfonso López Aguerri / Casiana Muñoz Tuñón (T) / Stefano Zarattini | The Quieting of Galaxies: Environmental Quenching in Dwarfs Across the Cosmic Web | La Caixa,FPI-SO,ARsResearch |
| 271 | Marc Huertas Company (T) / Michaela Hirschmann | Liking small and large scales in galaxy formation with Artificial Intelligence | La Caixa,ARsResearch |
| 223 | Sebastien Comerón Limbourg T: Johan Knapen | Probing the circumnuclear medium in AGN at scales smaller than 100 pc with MUSE AO-assisted integral field spectroscopy | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| – | Adriana de Lorenzo-Cáceres Rodríguez (T) / Rubén Sánchez Janssen | The past and future of nuclear stellar clusters and their host galaxies | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| STELLAR AND INTERSTELLAR PHYSICS – FÍSICA ESTELAR E INTERESTELAR | | | |
| 229 | Arturo Manchado Torres (T) / Boutheina Kerkeni / Ransel Barzaga | On the formation of amino acids in the Interstellar medium | La Caixa,FPI-SO,ARsResearch |
| 241 | Daniel Mata Sánchez (T) / Peter Jonker | Unveiling the Origins of Fast X-ray Transients | La Caixa,ARsResearch |
| 247 | David Jones (T) / Michael Abdul Masih | Using planetary nebulae to understand the common-envelope phase of binary evolution | La Caixa,FPI-SO,ARsResearch |
| 278 | Diego Godoy Rivera / Savita Mathur T: Paul Beck | The Role of Binary Systems in Shaping Stellar Rotation and Magnetic Activity in the Era of Modern Surveys | La Caixa,FPI-SO,ARsResearch |
| 273 | Gastón Escobar (T) / Sergio Simón Díaz | Connecting massive binaries from their birth to the formation of compact objects | ARsResearch |
| 265 | Jorge Casares Velázquez / Gastón Escobar (T) | Automated photometric techniques to unveil dormant black holes | ARsResearch |
| 243 | Nicolas Lodieu (T) | Mapping the Faintest Frontier: Finding and Characterising Metal-Poor Brown Dwarfs | La Caixa,FPI,FPI-SO,ARsResearch |
| 262 | Savita Mathur (T) / Diego Godoy Rivera | Magnetic activity of solar-like stars from the main sequence to the red-giant Branch | La Caixa,FPI-SO,ARsResearch |
| 231 | Teo Muñoz Darias (T) / Manuel A. Pérez Torres | Black Hole Transients: Accretion and Outflows | La Caixa,FPI-SO,ARsResearch |
| | Sara Rodríguez Berlanas / Artemio Herrero Davó (T) | Tracing the origins of massive runaway stars in | La Caixa,FPI-SO,ARsResearch |

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| | | Cygnus: A 6D kinematic and spectroscopic study | |
| EXOPLANETARY SYSTEMS AND SOLAR SYSTEM – SISTEMAS EXOPLANETARIOS Y SISTEMA SOLAR | | | |
| 257 | Enric Pallé Bagó (T) | Searching and characterizing earth-like planets with TESS+CHEOPS and CARMENES+ESPRESSO | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 236 | Gaia Lacedelli (T) / Enric Pallé Bagó | The sub-Neptune interiors: multi-model comparison and future observational constraints | La Caixa,ARsResearch |
| 233 | Javier Licandro Goldaracena (T) | Physical properties and evolution of small Near-Earth Objects from ATLAS-Teide and Canary Islands observations | La Caixa,ARsResearch,Other |
| 240 | Jonay I. González Hernández (T) / Alejandro Suárez Mascareño | Discovery and characterisation of Earth-like planets around cool dwarf stars from NIRPS guaranteed time observations | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 239/244 | Rafael Rebolo / López, Jonay I. González Hernández (T) | Hunting Rocky Planets in the Habitable Zones of Nearby Stars with the ultra-stable spectrographs ESPRESSO, HARPS, HARPS-N and HARPS3 | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 246 | Tianjun Gan (T) | Towards the boundary between giant planet and binary star formation | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 259 | Víctor J. Sánchez Béjar (T) / Nicolas Lodieu | Characterization and mass determination of young transiting planets | La Caixa,FPI,FPI-SO,ARsResearch |
| SOLAR PHYSICS – FÍSICA SOLAR | | | |
| 235 | Andrés Asensio Ramos (T) / Manuel Collados Vera | Solar image reconstruction and adaptive optics with machine learning | La Caixa,FPI-SO,ARsResearch,ARsInstrumentation |
| 254 | Christoph Kuckein / Tobías Felipe T: Sergio J. González Manrique | On the nature of solar magnetic bright points | La Caixa,FPI,FPI-SO,ARsResearch,Other |
| 250 | Sergio J. González Manrique (T) / Christoph Kuckein | Exploring Solar Filaments Through Machine Learning and Spectropolarimetric Data Analysis | La Caixa,FPI,FPI-SO,ARsResearch |

THE MILKY WAY AND THE LOCAL GROUP – LA VÍA LÁCTEA Y EL GRUPO LOCAL

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| 275 | Emma Fernández Alvar (T) / Matteo Monelli | The Local Group in Multi-dimensions | La Caixa,FPI,FPI-SO,ARsResearch |
| 224 | Giuseppina Battaglia (T) / Guillaume Thomas | Investigations of dark matter halo properties of Local Group dwarf galaxies in the Gaia and WEAVE era | La Caixa,FPI,FPI-SO,ARsResearch |
| 225 | Guillaume Thomas / Giuseppina Battaglia (T) | Exploring the structure of the Milky Way stellar halo with state-of-the-art large scale surveys | La Caixa,FPI,FPI-SO,ARsResearch |

INSTRUMENTACIÓN ASTROFÍSICA

| Nº | DIRECTOR/CODIRECTOR/TUTOR | TÍTULO PROYECTO | CONVOCATORIAS |
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| 279 | Ricardo Génova Santos / David Díaz Martín (T) | FPGA-based processing for real-time correction of response deviations in kinetic inductance detector arrays | La Caixa,FPI,FPI-SO,ARsInstrumentation |