Relación de Proyectos aprobados para el Programa "Astrofísicos Residentes" 2019

Especialidad Investigación en Astrofísica	
Director/es y Tutor	**Título del Proyecto**
Director: Dr. Manuel Ángel Pérez Torres (IAC/ULL) Co-director: Dr. Pablo Rodríguez Gil (IAC/ULL)	"Testing white dwarf X-ray masses in magnetic cataclysmic variables with dynamical studies"
Directores: Dr**.** Pablo Rodríguez Gil (IAC/ULL), Dr. Manuel Ángel Pérez Torres (IAC/ULL) Tutor: Dr. Pablo Rodríguez Gil	"Indirect insights into orbital parameters of low-mass X-ray binary transients"
Director: Prof**.** Ramón J. García López Co-directora: Dra. Josefa Becerra González	"Exploring the extreme extragalactic gamma-ray sky through blazars"
Director: Prof. Fernando Moreno Insertis (IAC /ULL) Co-director: Dr. Daniel Nóbrega Siverio (University of Oslo)	"A realistic study of shock fronts in the solar atmosphere"
Director: Dr. Jairo Méndez Abreu Co-director: Dr. José Alfonso López Aguerri	"The Origins of Galaxy Bimodality: Quenching Mechanisms over the last 8 Gyrs"
Director: Dr. Teo Muñoz Darias Co-directora: Dra. Montserrat Armas Padilla Tutor: Dr. Ignacio González Martínez-País	"Cold winds from accreting black-holes and neutron stars"
Director: Dr. Helmut Dannerbauer (Ramón y Cajal fellow) Co-director: Dr. José Miguel Rodríguez Espinosa	"Impact of environment on molecular gas reservoirs probed in distant cluster and field galaxies"
Director: Dr. Ricardo Génova-Santos	"Precision cosmology using the Cosmic Microwave Background and its correlation with the large-scale structure of the Universe"
Director: Dr. Claudio Dalla Vecchia Co-director: Dr. Christopher Brook	"Stellar evolution and feedback models in cosmological simulations"
Directora: Dra. Adriana de Lorenzo-Cáceres Rodríguez Co-directora: Dra. Begoña García Lorenzo	"A conclusive assessment of stellar bars as triggering mechanisms for moderately luminous nuclear activity"
Director: Dr. Jorge Casares Velázquez Co-director: Dr. Teo Muñoz Darias	"Multi-wavelength timing of low-mass X-ray binaries"
Director: Dr. Johan Knapen Co-director: Dr. Marc Huertas-Company Tutor: Dr. Ignacio Trujillo	"Classifying faint parts of galaxies using LSST"

Director: Dr. Jordi Cepa Co- directores: Dra. Ana María Pérez García (CAB/INTA-CSIC), Dr. Ricardo M. Pérez Martínez (ISDEFE/ESA)	"Evolution of obscured Super Massive Black Holes and their host galaxies along the cosmic time"
Director: Dr. Aníbal García Hernández Co-directores: Dr. A Manchado, Dra. Letizia Stanghellini (NOAO)	"Carbon in dusty, compact Galactic planetary nebulae as seen by the HST"
Director: Dr. Carlos M. Gutiérrez	"A panchromatic approach to the dust content of galaxy clusters"
Directora: Dra. Giuseppina Battaglia (GB) Co-directora: Dra. Ana Monreal Ibero (AMI) Tutor: Prof. Artemio Herrero Davo	"Paving the way for next generation spectroscopic studies of resolved stellar populations in and beyond the Local Group"
Directora: Dra. Cristina Ramos Almeida Tutor: Dr. José Antonio Acosta Pulido	"Characterizing AGN feedback in quasars using near-infrared spectroscopy"
Director: Dr. Jorge Martin Camalich	"Astrophysical and Cosmological Implications of the Flavor Anomalies"
Director: Dr. J. Alfonso López Aguerri Co-directora: Dra. Elena D'Onghia (Wiscosin-Madison University) Tutora: Dra. Casiana Muñoz Tuñón	"Dynamics of Milky Way like barred galaxies"
Director: Dr. Javier Trujillo Bueno	"Hanle and Zeeman Light for Solar and Stellar Coronal Loops"
Directora: Dra. Carme Gallart	"The Star Formation History of the Small Magellanic Cloud"
Director: Dr. José Miguel Rodríguez Espinosa Tutora: Dra. Casiana Muñoz Tuñón	"Physics of the star forming galaxies near the epoch of re-ionisation"
Director: Dr. Chris Brook Co-directora: Dra. Arianna Di Cintio Tutor: Dr. Claudio Dalla Vecchia	"Exploring the low surface brightness universe with simulations: confronting cosmology's small scale problems"
Director: Dr. Nicolas Lodieu Co-director: Dr. Carlos Allende Prieto	"Filling in the gap of current stellar spectral libraries: M dwarfs to constrain the Initial Mass Function in galaxies"
Director: Dr. Sergio Simón-Díaz	"On the evolutionary nature of massive B-type supergiants: a modern empirical reappraisal using data from IACOB, Gaia and TESS"
Director: Dr. Jonay I. González Hernández	"Detection and characterization of Earth-like planets in the habitable zone of K and M-dwarfs with ESPRESSO"
Director: Dr. Alexandre Vazdekis Co-directores: Dr. Michael Beasley, Miguel Cerviño Saavedra	"Surface Brightness Fluctuations to constrain galaxy stellar populations"
Director: Dr. Carlos Allende Prieto Co-director: Dr. Jonay I. González Hernández	"The metal-poor end of the Galactic Halo: characterization of extremely iron-poor stars using high-resolution spectroscopy"

Director: Dr. Marc Huertas-Company	"Discovering the unexpected with deep learning: hunting the Hubble sequence at z~5 with JWST"
Directora: Dra. A. Di Cintio (ADC) Co-directora: Dra. G. Battaglia (GB) Tutora: Dra. Carme Gallart Gallart	"The impact of dark and/or luminous haloes mergers onto the star formation history and internal kinematics of dwarf galaxies"
Directora: Dra. Ana Monreal-Ibero (AMI) Co-directora: Dra. Begoña García-Lorenzo (BGL) Tutora: Dra. María Jesús Arévalo Morales	"In-depth study of local (Ultra)luminous Infrared Galaxies with MUSE as benchmark for high-z starburst galaxies"
Director: Dr. Michael A. Beasley Co-director: Dr. Alexandre Vazdekis Tutor: Dr. Alexandre Vazdekis	"Galactic globular clusters in 3D: Exploring their stellar populations with MUSE"
Director: Dr. Tobías Felipe	"Inference of sunspot interiors with Deep Learning"
Director: Dr. Andrés Asensio Ramos Co-Directora: Dra. Mariam Martínez González	"Applications of deep Learning in Solar Physics"