



Relación de Proyectos aprobados para el Programa “Astrofísicos Residentes” 2018

Especialidad Investigación en Astrofísica	
Director/es y Tutor	Título del Proyecto
Director/Tutor: Dr. Juan A. Belmonte. Codirector: Dr. César Glez. García (Incipit-CSIC).	“Astronomía y Cultura en el Camino de Santiago”
Director/Tutor: Dr. Martín López Corredoira.	“Distributions of density and stellar kinematics in the outermost regions of the Milky Way disc”
Director/Tutor: Dr. D. Anibal García Hdez. Codirectores: Dr. A. Manchado Torres y L. Stanghellini.	“Carbon in dusty, compact Galactic planetary nebulae as seen by the HST”
Director: Dr. Teodoro Muñoz Darias. Tutor: Dr. I. Glez. Mtnez-Pais.	“Accretion and ejection processes in black-hole X-ray binaries”
Director/Tutor: Dr. P. Ll. Pallé. Co-directores: Dr. Rafael A. García (CEA, Francia) y Frank Grundahl (Aarhus Univ.).	“Multilayer helioseismology with the SONG telescope and evolution of solar activity”
Director/Tutor: Dr. J.I. González Hernández.	“Detection and characterization of Earth-like planets in the habitable zone of K and M-dwarfs with ESPRESSO”
Director/Tutor: Dr. N. Lodieu. Codirectores: A. Vazdekis y Dr. C. Allende.	“Filling in the gap of current stellar spectral libraries: M dwarfs to constrain the Initial Mass Function in galaxies”
Directora: Dr. G. Battaglia. Codirectora: A_Monreal. Tutor: Prof. A. Herrero Davó.	“Paving the way for next generation spectroscopic studies of resolved stellar populations in and beyond the Local Group”
Director/Tutor: Dr. C. Esteban.	“Ionised gas flows in the Orion Nebula: properties and environmental dependences”
Directora/Tutora: Dra. C. Ramos Almeida. Codirector: Dr. J.A. Acosta Pulido.	“Characterizing AGN feedback in quasars using near-infrared spectroscopy”
Directora: Dr. S. Mathur. Codirector: Dr. R. A. Garcia. Tutor: Dr. P.L. Pallé.	Galacto-Archeology with asteroseismic analysis of Kepler, K2, and TESS missions”
Director/Tutor: Dr. J. Knapen. Codirector: F. Tabatabaei.	Galaxy Centres: Structure Formation in Extreme Conditions”
Director/Tutor: Dr. A. Asensio. Codirectora: Dr. M. Mtnez. Glez.	“Deep Learning and Bayesian Inference in Solar Physics”
Directora: Dra. B. García-Lorenzo. Codirectora: Dra. A. Monreal-Ibero. Tutora: Dra. M.J. Arévalo.	In-depth study of local (Ultra) luminous Infrared Galaxies with MUSE as benchmark for high-z starburst galaxies”
Directora/Tutora: Dra. A. Prieto	“The center of an active galaxy: rage and power of starving black holes”
Director/Tutor: Dr. J. Falcón. Codirectora: Dra. I. Pérez Martín (Univ. Granada).	“Vertical disk heating in spiral discs: secular evolution or external origin?”
Director/Tutor: Dr. M. Collados. Codirector: Dr. N. Vitas.	“Partial ionization influence on the structure and dynamics of the solar/stellar atmospheres”
Directora: Dra. G. Battaglia. Codirectores: Dra. A. Di Cintio y Dr. C. Dalla. Tutora: C. Gallart.	The impact of dark and/or luminous haloes mergers onto the star formation history and internal kinematics of dwarf galaxies”



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Director/Tutor: Dr. E. Pallé	"Characterizing Exoplanet Atmospheres with CARMENES and ESPRESSO"
Director/Tutor: Dr. J. Trujillo Bueno. Codirector: Dr. T. del Pino.	Ultraviolet Spectropolarimetry: Opening a New Diagnostic Window in Solar and Stellar Physics"
Director/Tutor: Dr. C. Allende.	"Toward extreme precision measuring stellar chemical abundances"
Director/Tutor: Dr. C. Allende	The Sun a rosetta stone to understand stars"
Director: Dr. J.A. Acosta Pulido; Codirector: Dr. J. Font Serra. Tutor: Prof. J. E. Beckman.	A new method for high resolution 3-D velocity mapping of galaxies, supernova remnants, planetary nebulae, and circumnuclear zones of AGNs"
Director/tutor: Dr. A. Asensio. Codirector: Dr. T. Felipe.	"Inference of sunspot interiors with Deep Learning"
Director/Tutor: Dr. J.A. López-Aguerre. Codirector: Dr. J. Méndez-Abreu.	"The Origins of Galaxy Bimodality: Quenching Mechanisms over the last 8 Gyrs"
Director/Tutor: Prof. A. Herrero. Codirectora: Dra. M. García.	"Massive stars in Sextans A: the early Universe in the backyard"
Director/Tutor: Dr. H. Dannerbauer. Codirector: Prof. JM Rguez-Espinoza.	"Witnessing the Build-Up of Galaxy Clusters in the Early Universe"
Director/Tutor: Dr. M. Beasley. Codirectores: Dr. A. Vazdekis y J. Falcon.	"Galactic globular clusters in 3D: Exploring their stellar populations with MUSE"
Director/Tutor: Dr. H. Deeg. Codirector: Dr. H. Parviainen.	"Populations of Extrasolar Planet Systems"
Director/Tutor: Dr. E. Pallé. Codirectora: Dra. M.R. Zapatero.	"Atmósferas frías: enanas marrones y planetas"
Director: Dr. C. Dalla Vecchia. Codirector: Dr. A. Balaguera. Tutor: Jesús Falcón.	"Numerical cosmology with GPU-accelerated computing"
Director/Tutor: Dr. J. I. Glez. Hdez. Codirector: Dr. C. Allende.	The metal-poor end of the Galactic Halo: characterization of extremely iron-poor stars using high-resolution spectroscopy"
Director/tutor: Prof. R.J. García-Lopez. Codirectora: Dra. J. Becerra	"Exploring the enigmatic extragalactic gamma-ray sky through blazars"

Especialidad Instrumentación Astrofísica	
Director/es y Tutor	Título del Proyecto
Director: Dr. R. Hoyland. Tutor: Dr. J.A. Rubiño.	"Instrumentation for the Tenerife Microwave Spectrometer (TMS)"
Director: Dr. R. López López. Tutor: Dr. A. Oscoz.	Adaptive and Lucky Imaging Optics in a Lightweight Instrument
Director/Tutor: Dr. J. Sánchez-Capuchino. Codirectora: P. Fernández.	Optical/Mechanical Design and Prototyping of an Earth-Deep Space Laser Communication Facility"