

PROYECTOS PROGRAMA "ASTROFÍSICOS RESIDENTES 2021"

ESPECIALIDAD DE INVESTIGACION ASTROFISICA

Nº	DIRECTOR/CO-DIRECTOR/TUTOR	TITULO PROYECTO
1	Director: Dr. Ignacio Trujillo Cabrera	"The crisis of the Cold Dark Matter model: where are the missing satellites?"
2	Director: Dr. Jesús Falcón Barroso Co-director: Dr. Marc Huertas-Company	"Unveiling the mass assembly of galaxies coupling artificial intelligence and orbital decomposition methods"
3	Director: Prof. José M. Rguez. Espinosa Co-Directora y Tutora: Dra. Casiana Muñoz-Tuñon	"Identifying the sources that re-ionised the Universe"
4	Director: Dr. Alexandre Vazdekis Co-directores: Dra. Anna Ferré Mateu y Dr. Michael Beasley	"Young stellar populations in Early-Type Galaxies with cosmic time:constraints on galaxy formation scenarios"
5	Directora: Dra. Alicia López Oramas Co-Director y Tutor: Prof. Ramón García López	"The Galactic gamma-ray sky"
6	Director: Dr. Andrés Asensio Ramos Co-Director: Dr. Iñigo Arregui	"Diagnostics of the solar corona with new generation inversion tools"
7	Director: Dr. Sebastien Comerón Tutor: Dr. Johan Knapen	"The evolution of thick discs seen in deep HST and JWST imaging"
8	Directora: Dra. Carme Gallart Co-Director: Dr. Tomás Ruíz-Lara (Kapteyn, Netherlands)	"Unravelling the formation and evolution of the Milky Way disk with Gaia"
9	Director: Dr. Matteo Monelli Co-directora y Tutora: Dra. Carme Gallart	"Reconstructing the Milky Way halo merger history with Gaia"
10	Director: Dr. Christopher Brook Co-directora: Dra Arianna Di Cintio Tutor: Michael Beasley	"Exploring the low surface brightness universe with simulations: confronting cosmology's small scale problems"
11	Director: Dr. Enric Pallé	"Searching and characterizing earth-like planets with TESS+CHEOPS and CARMENES+ESPRESSO"
12	Directora: Dra. Arianna Di Cintio Tutora: Dra. Carme Gallart	"Local Group simulations with Black Holes feedback: detailed analysis and comparison with ongoing and upcoming surveys"
13	Directora: Dra. Josefa Becerra Co-Director: Dr. José A. Acosta Pulido Tutor: Prof. Ramón J. García López	"Exploring the extreme extragalactic gamma-ray sky through relativistic jets"
14	Director: Dr. Ovidiu Vaduvescu Co-director: Dr. Marcel Popescu Tutor: Dr. Javier Licandro Goldaracena	"Physical Properties of Near Earth Asteroids"
15	Director: Dr. Mahmoudreza Oshagh Co-director: Dr. Enric Pallé	"Studying exoplanetary atmosphere using chromatic line-profile tomography technique"
16	Directora: Dra. Giuseppina Battaglia Co-director: Dr. Guillaume Tomas Tutora: Dra. Giuseppina Battaglia	"Investigations of dark matter halo properties of Milky Way dwarf galaxies in the Gaia and WEAVE era"
17	Director: Dr. Hans Deeg Co-director: Dr. Hannu Parviainen	"Populations of Extrasolar Planet Systems"
18	Director: Prof. Javier Trujillo Bueno Co-director: Dr. Ernest Alsina Ballester	"Investigating the magnetism of the solar chromosphere through radiative transfer modeling of spectropolarimetric observations with CLASP and DKIST"
19	Directora: Dra. Begoña García Lorenzo Co-directora: Dra. Cristina Ramos Almeida	"Statistical assessment of the triggering of nuclear activity in nearby isolated galaxies"
20	Director: Dr. César Esteban López Co-director: Dr. Jorge García Rojas	"Internal and global properties of local star-forming nebulae (HII regions)"
21	Directora: Dra. Elena Khomenko Co-director: Dr. David Mtnez Gómez	"Heating of the solar chromosphere by means of magneto-acoustic waves"

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22	Director: Dr. Nicolas Lodieu Co-director: Dr. Eduardo Martín Guerrero de Escalante	"The halo mass function and the search for metal-poor brown dwarfs"
23	Director: Dr. Carlos Allende Co-director: Dr. Jonay González Hernández	"The metal-poor end of the Galactic Halo: characterization of extremely iron-poor stars using high-resolution spectroscopy"
24	Director: Dr. Guillaume Thomas Co-director: Dr. Christopher Brooks Tutor: Dr. Christopher Brooks	"Observing" cosmological simulations to retrace the accretion history of the Local Group"
25	Directora: Dra. Cristina Ramos Almeida Co-Director: Dr. José A. Acosta Pulido	"The impact of AGN feedback in galaxy evolution"
26	Director: Prof. Rafael Rebolo Co-director: Dr. Alejandro Suárez Mascareño	"Rocky planets in the habitable zone of nearby K-M stars with ESPRESSO"
27	Director: Dr. Jonay I. González Hernández Co-director: Dr. Alejandro Suárez Mascareño	"Stellar magnetic activity and rocky planets in M-type stars and Brown dwarfs with NIRPS"
28	Director: Dr. Basilio Ruiz Cobo Co-director: Dr. Sergio Javier González Manrique	"The Dynamic and Magnetic Evolution of Emerging Flux Regions"
29	Director: Dr. Johan Knapen Co-director: Dr. Sebastien Comeron	"Understanding gas flows in AGN and starbursts"
30	Director: Dr. Johan H. Knapen Co-director: Dr. Simón Díaz García	"Deep UV and optical imaging of the outskirts of disk galaxies"
31	Director: Dr. Ignacio Martín Navarro Tutora: Dra. Cristina Ramos Almeida	"The co-evolution of galaxies, black holes, and dark matter halos"
32	Directora: Dra. Savita Mathur Co-director: Dr. Nicolas Lodieu	"Testing the evolution of mass-radius relation with binaries in young open clusters and moving groups"
33	Director: Dr. Jorge Martin Camalich Co-director: Dr. Paul Beck	"Searching for ultralight dark matter with stellar cooling"
34	Director: Prof. Rafael Rebolo López Co-directora: Dra. Susana Iglesias-Groth	"Very low-mass stars, brown dwarfs and exoplanetary systems"
35	Director: Dr. Arturo Manchado Torres Co-directora: Dra. Eva Villaver (UNAM)	"La contribución del hidrógeno molecular a la materia bariónica del universo"
36	Director: Dr. Andrés Balaguera Antolínez Co-director: Dr. Francisco-Shu Kitaura Joyanes Tutor: Dr. José Alberto Rubiño	"Simulating the Large Scale Structure of the Universe"
37	Director: Dr. Roi Alonso Sobrino Co-director: Dr. Hans Deeg	"Searching and characterizing planets and planetesimals around white dwarfs"
38	Director: Dr. Ricardo T. Génova Santos Co-director: Dr. José Alberto Rubiño-Martín (co-supervisor)	"Clearing the path to inflation's B-modes through multi-frequency observations of CMB foregrounds from the Teide Observatory"
39	Directora: Dra. Casiana Muñoz-Tuñón Co-director: Dr. Jairo Méndez-Abreu	"Star Formation Near and Far: A case for high-spectral resolution spectroscopy"
40	Director: Dr. Javier Licandro Goldaracena Co-director: Dr. Miquel Serra Ricart	"Compositional studies of asteroid families using Deep Learning technics"
41	Directores: Dr. Daniel J. Lennon y Dra. Miriam García (CAB) Co-director: Prof. Artemio Herrero Davó Tutor: Prof. Artemio Herrero Davó	"Looking for progenitors of massive stellar black holes: Is there evidence of homogeneous chemical evolution in metal poor galaxies?"
42	Director: Prof. Artemio Herrero Davó Co-director: Dr. Fernando Comerón (ESO)	"Massive stars at intermediate galactic scales: the Carina Nebula"

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43	Director: Prof. John Beckman Co-directores: Dr. Juan Antonio Fdez-Ontiveros (INAF-IAPS, Rome) Tutora: Dra. Almudena Prieto	"Star Formation Reservoirs in the Vicinity of Black Holes"
44	Directora: Dra. Almudena Prieto	"The nearest Supermassive Black Holes: approaching their radius of influence"
45	Director: Dr. Jorge Sánchez Almeida Co-director: Dr. Claudio dalla Vecchia	"Constraints on the observability of the warm-hot intergalactic medium through emission lines"
46	Director: Dr. Helmut Dannerbauer Co-director: Dr. Carlos Gutiérrez de la Cruz (co-supervisor)	"Studying the formation and evolution of galaxies in the distant universe with the ESO public survey SHARKS"
47	Director: Dr. Claudio Dalla Vecchia Co-director: Dr. Ignacio Trujillo Tutor: Dr. Jorge Sánchez Almeida	"Probing the primordial mass distribution with massive disk galaxies"
48	Director: Dr.D. Anibal García-Hdez Co-director: Dr. Thomas Masseron	"Identifying chemically peculiar stars in large spectroscopic databases with machine learning algorithms"
49	Director: Dr. Thomas Masseron Co-director: Dr. D. Anibal García -Hdez	"Recovering spectral lines formation via machine learning algorithm"
50	Director: Dr. Andrés Kovacs Co-director: Dr. Carlos Hdez. Monteagudo	"Probing the nature of gravity in extreme under-dense cosmological regions"
51	Director: Dr. Carlos Hdez Monteagudo Co-director: Dr. Andrés Balaguera-Antolínez	"Exploring Angular Redshift Fluctuations in new Cosmological Settings"
52	Director: Dr. Sergio Simón Díaz	"A large-scale empirical approach to massive star evolution with IACOB, WEAVE and Gaia"
53	Director: Dr. Francisco Kataura Co-director: Dr. Marc Huertas-Company	"Cosmology with Bayesian Deep Learnin"
54	Director: Dr. Manuel Collados Co-directora: Dra. Elena Khomenko	"High-resolution three dimensional simulations of magneto-convection including effects of partial ionization"

ESPECIALIDAD DE INSTRUMENTACION ASTROFISICA

Nº	DIRECTOR/CO-DIRECTOR/TUTOR	TITULO PROYECTO
1	Director: Dr. Hugo García Vázquez Co-director: Dr. José Javier Díaz García Tutor: Dr. José Javier Díaz García	"Contributions to the design of integrated circuits for detector interfaces used in astrophysical instrumentation"
2	Director: Dr. Enrique Joven Co-director: Dr. Javier de Miguel	"A tunable haloscope for a broad band search for axion dark matter above 25 μeV "