



'Astronomy Adventure in the Canary Islands' 2018

Directors: Nayra Rodríguez Eugenio and Rosa Doran

Dates: 30 July – 3 August, 2018

Venue: IAC Headquarters, San Cristóbal de La Laguna, Tenerife, Canary Islands, Spain

Duration: 30 hours

Lecturers:

NRE: Nayra Rodríguez Eugenio (Instituto de Astrofísica de Canarias - IAC, Spain)

RD: Rosa Doran (Núcleo Interativo de Astronomia - NUCLIO, Portugal)

FL: Fraser Lewis (Faulkes Telescope Project, Cardiff University, United Kingdom)

ST: Steph Tyszka (NUCLIO, Portugal)

Organizers:

Instituto de Astrofísica de Canarias (IAC)

Núcleo Interactivo de Astronomia (NUCLIO)

Faulkes Telescope Project (Cardiff University)

Programme

Sunday - July 29th Welcome to the Astronomy Adventure in the Canary Islands 2018

Location: Hotel Laguna Nivaria

Evening

17:00-18:00	Ice Break – Meet and Greet	RD, NRE, ST
18:00- 19:00	Schools in the 21 st Century - Challenges and Opportunities	RD, ST
19:00 – 20:00	Welcome Cocktail	All

Monday - July 30th Introduction to Astronomy and to the course theme: stars and planets

Location: IAC Headquarters

Morning

9:00 – 9:30	Welcome	NRE, RD, FL
9:30 – 10:00	Presentations: AACI, IAC, GTTP, Teachers	NRE, RD, FL
10:00 – 11:00	Introduction to Astronomy/Astrophysics	NRE
11:00 – 11:30	Break	
11:30 – 13:00	Stars and their Planets	NRE, RD, FL

Afternoon

14:30 – 15:00	Warm up	
15:00 – 17:00	Inquiry, Interdisciplinarity and Big Ideas of Science	RD

Tuesday July 31 The Electromagnetic Spectrum

Location: IAC Headquarters

Morning

9:00 – 9:30	Warm up	ST
9:30 – 10:30	The message of light (Introduction to the electromagnetic spectrum)	NRE
10:30 – 11:00	Building a Spectroscope	RD
11:00 – 11:30	Break	
11:30 – 12:30	Practical Activity with Spectroscope (The barcode of elements and Light Pollution)	NRE, RD
12:30 – 13:15	Visit to the IAC Instrumentation Area	Coordinator of the Area

Afternoon

14:30 – 15:00	Warm up	ST
15:00 – 17:00	Discover an Exoplanet	FL

Wednesday August 1 Observing the Universe

Morning Location: IAC Headquarters

9:00 – 9:30	Warm up	ST
9:30 – 11:00	Introduction to Stellarium	RD, FL

11:00 – 11:30 Break

11:30 – 13:00	Preparing an Observing Session (with Stellarium and others)	FL, NRE
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Afternoon Training visit to Teide Observatory

14:00 – 15:30	Trip to Teide Observatory	
15:30 – 16:30	Astronomy in the Canary Islands and their Observatories	NRE
16:30 – 17:00	Workshop: Observing the Sun	NRE
17:00 – 19:30	Visit to several telescopes with explanations about their work and the science carried with them	NRE

19:30 – 20:30 Break for dinner

21:00 – 22:00	Workshop: Introduction to Astrophotography	Daniel López
22:00 – 23:30	Workshops: 1) Astrophotography, 2) Night observation with amateur telescopes, 3) “Astronomers at work”	NRE, Daniel López

Thursday August 2 Robotic Telescopes and astronomical images

Location: IAC Headquarters

Morning

9:30 – 10:00	Warm up	ST
10:00 – 10:30	Observing with Robotic Telescopes	FL, NRE
10:30 – 11:00	PETeR, Robots looking at the Sky (IAC)	NRE

11:00 – 11:30 Break

11:30 – 12:00	The Faulkes Telescope Project	FL
12:00 – 13:30	Introduction to image processing (SalsaJ and others)	FL, NRE

Afternoon

14:30 – 15:00	Warm up	
15:00 – 17:00	Detecting Variable Stars	NRE, FL

Friday August 3 Active learning with Astronomy

Location: IAC Headquarters

Morning

9:00 – 9:30	Warm up	ST
9:30 – 11:00	Playing with Constellations	RD
11:00 – 11:30	Break	
11:30 – 13:00	Teachers Experiencies (15-20 minutes each)	

Afternoon

14:30 – 15:00	Warm up	ST
15:00 – 16:00	Open Schools for Open Societies	RD
16:00 - 17:00	Evaluation and final remarks	

Saturday August 4

OPTIONAL ACTIVITY at own expenses: Training visit to Observatorio del Roque de los Muchachos (La Palma)