

## UKRI STFC Introductory Course in Astronomy for New Research Students

Queen's University Belfast: Monday 27<sup>th</sup> August 2018 – Friday 31<sup>st</sup> August 2018

### Lecture programme

#### **Sunday, 26<sup>th</sup> August 2018:**

16.00 – 18.00 Registration and welcome reception/icebreaker

#### **Monday, 27<sup>th</sup> August 2018:**

09.30 – 10.00 Welcome and introduction from Ted of School of Mathematics and Physics  
10.00 – 11.00 Planetary science (Adam Masters, Imperial)  
11.00 – 11.30 Tea/coffee  
11.30 – 12.30 Supernovae (Kate Maguire, QUB)  
12.30 – 14.00 Lunch  
14.00 – 15.00 Public engagement in astronomy (Alan Fitzsimmons, QUB)  
15.00 – 15.30 Tea/coffee  
15.30 – 16.30 Preparing for a career in science – applying for jobs (Stephen Smartt, QUB)  
16.30 – 17.30 Active galaxies (Chris Done, Durham)

#### **Tuesday, 28<sup>th</sup> August 2018:**

09.00 – 10.00 Statistical methods in astronomy (Alan Heavens, Imperial)  
10.00 – 11.00 Comets and asteroids (Michele Bannister, QUB)  
11.00 – 11.30 Coffee/tea  
11.30 – 12.30 Molecular astrophysics in the era of ALMA (Catherine Walsh, Leeds)  
12.30 – 14.00 Lunch  
14.00 – 15.00 Impact of STFC research: sustainable food and other examples (Seb Oliver, Sussex)  
15.00 – 15.30 Tea/coffee  
15.30 – 16.30 Galaxy evolution (Vivienne Wild, St Andrews)  
16.30 – 17.30 Kilonovae and electromagnetic counterparts of gravitational waves (Stephen Smartt, QUB)

#### **Wednesday, 29<sup>th</sup> August 2018:**

09.00 – 10.00 Cosmological constraints (Antony Lewis, Sussex)  
10.00 – 11.00 The high-redshift Universe (Manda Banerji, IoA Cambridge)  
11.00 – 11.30 Tea/coffee  
11.30 – 12.30 The host stars of exoplanets (Katja Poppenhaeger, QUB)  
12.30 – 13.30 Lunch  
13.30 – 18.00 Bus tour of Belfast City

#### **Thursday, 30<sup>th</sup> August 2018:**

09.00 – 10.00 Identification and characterisation of exoplanets (Neale Gibson, QUB)  
10.00 – 11.00 Astronomical instrumentation (William Taylor, UKATC)  
11.00 – 11.30 Tea/coffee  
11.30 – 12.30 Unconscious bias in science (Katja Poppenhaeger, QUB)  
12.30 – 14.00 Lunch  
14.00 – 15.00 Astronomical computing in the UK (Mark Wilkinson, Leicester)  
15.00 – 15.30 Tea/coffee  
15.30 – 16.15 The science in science-fiction movies and TV shows (Francis Keenan, QUB)  
18.00 Course Dinner in Stormont

#### **Friday, 31<sup>st</sup> August 2018:**

09.00 – 10.00 Gravitational waves (Ilya Mandel, Birmingham)  
10.00 – 11.00 Atomic processes in astrophysics (Cathy Ramsbottom, QUB)  
11.00 – 11.30 Tea/coffee  
11.30 – 12.30 Galaxy chemical evolution (Brad Gibson, Hull)  
12.30 Lunch and end

Note that all lectures will be 50 minutes in duration, to allow time for questions.