



Newcastle University International Summer School in Mathematics, Statistics and Physics

Tuesday June 22nd – Wednesday June 23rd 2021

09:30-15:30 (UK time; GMT+1)

Programme for Tuesday June 22nd (all times are UK; GMT+1)

Welcome and Introductions (09:30-10:30; official start 10:00)

- 09:30-10:00: Guests free to join Zoom call
- 10:00-10:05: Official start: Welcome from Dr. Nick Parker, Head of School (Mathematics, Statistics and Physics)
- 10:05-10:30: Dr. Lee Fawcett: Housekeeping; undergraduate programmes in mathematics at Newcastle

Session 1 (10:30-11:50)

- 10:30-10:50: Session 1: Dr. Andrew Baggaley: *“Fluid Dynamics: From Plankton To Pulsars”*
- 10:50-11:10: Session 2: Dr. Joe Matthews: *“Dicing With Death: Do Speed Cameras Save Lives?”*
- 11:10-11:30: Session 3: Dr. Danielle Leonard: *“Dark Matter”*
- 11:30-11:50: *Break, questions to the speakers*

Session 2 (11:50-13:00)

- 11:50-12:20: Student panel question and answer session
- 12:20-13:00: *Break, further meet-and-greet with the panel during break*

Session 3 (13:00-14:20)

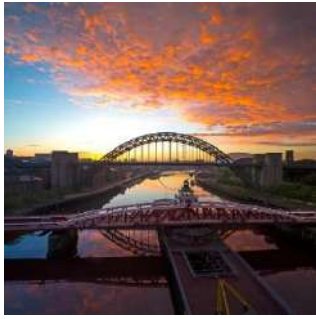
- 13:00-13:20: Session 4: Prof. Tami Rogers: *“Hot Jupiters”*
- 13:20-13:40: Session 5: Dr. Evgenios Kakariadis: *“An Excursion to Advanced Mathematics... by Random Walks”*
- 13:40-14:00: Session 6: Dr. James Waldron: *“An Introduction to Cryptography”*
- 14:00-14:20: *Break, questions to the speakers*

Session 4 (14:20-15:10)

- 14:20-14:40: Session 7: Dr. Lee Fawcett: *“The Storm Of The Century”*
- 14:40-15:00: Session 8: Stuart Hall: *“Complex Numbers and Chemistry: Finding New Medicines Using $\sqrt{-1}$ ”*
- 15:00-15:10: *Questions to the speakers*

Close (15:10-15:30)

- 15:10-15:30: Official close, and looking ahead to day 2



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- 10:00** Introductions to the International Office Team, run through programme, zoom links, go to your group
- 10:10** Go into your allocated Zoom Room, meet your group and Group Facilitator for the day. Activity One – **‘Packing for University’**, go into break out rooms
- 11:35** Activity Two – Mini Research and Presentation Project - **‘Newcastle University Services’**, go into breakout rooms
- 12:35** Break for 40 mins
- 13:15** Return to large group – Activity Three – **‘Fun facts about Newcastle, the culture and the local dialect’** with Robert Lundgren
- 14:15** Activity Four - **Newcastle University Campus video** – any questions?
- 14:30** Activity Five – **University Jargon Quick Quiz**
- 14:50** Closing Words
- 15:00** End of programme