



Royal  
Astronomical  
Society

**RAS James Dungey Lecture 2022**  
**Dr Licia Ray**

Dr Licia Ray is a well-respected expert in the science of how planetary atmospheres couple to their local space environments, focussing on gas giant planets. She uses numerical models, and in situ and remote sensing data to understand planetary magnetosphere-ionosphere-thermosphere systems. In particular, she has developed a steady state model of the magnetosphere-ionosphere current system at Jupiter that is able to reproduce many of the observed characteristics of Jupiter's auroral structure. Her novel modelling and observational analyses have important relevance and applications to the rapidly growing research area of exo-planets.

Among her many achievements Dr Ray has also developed innovative training sessions for practical laboratory post-graduate teaching assistants that includes disability and gender awareness, new laboratory activities for undergraduate students and she has received excellent feedback from students. Dr Ray has demonstrated that she is an outstanding communicator of planetary science having delivered well-received lecture courses and talks to non-specialist audiences of all ages. Her commitment is also evidenced by her organisation of science festivals, teacher training and mentoring of secondary school students.

For these reasons Dr Licia Ray has been awarded the James Dungey Lectureship.