



Royal  
Astronomical  
Society

### **Dr Ryan Milligan - James Dungey Lecture (G)**

Dr. Ryan Milligan is awarded the James Dungey Lecture for his talent to communicate his research on complex solar physics topics in an understandable way for a general audience. Dr Milligan has made significant contributions to our understanding of solar flares and the impact that the radiation from flares has on the Earth's ionosphere. Dr. Milligan uses multi-wavelength observations from space missions to study the fundamental physical processes that occur in solar flares. Much of his research has focussed on the important role that the solar chromosphere has in determining the flows of mass and energy during solar flares.

His studies on the mechanism by which solar flares generate their high temperatures and densities has been influential in the community. Dr. Milligan was the first to detect acoustic oscillations in disk-integrated Lyman-alpha emission, he established Lyman-alpha as a significant radiator of flare energy and confirmed the centre-to-limb variation of optically thick flare emission using stereoscopic observations from Earth and Mars.

Dr. Milligan is a talented science communicator who has given public lectures to audiences of different backgrounds and ages, as well as contributing to television and radio shows.