



Royal
Astronomical
Society

The 2024 Fowler Award (G) is awarded to Dr Christopher Smith

Dr Christopher Smith has contributed seminal research on the complex physics of magnetosphere-ionosphere coupling at Jupiter and Saturn, which has proven crucial for understanding observations of changes in Saturn's apparent rotation rate.

Dr Smith developed a leading theory that distortions in auroral currents at Saturn could originate from an asymmetric source of heating within the planet's thermosphere. He went on to develop novel numerical models to test his hypothesis, and subsequently showed that current distortions require input from processes deeper in the atmosphere.

Recent observations of ionospheric flows at Saturn have supported Dr Smith's predictions, demonstrating the impact of his work.

Alongside his scientific achievements, Dr Smith has demonstrated his dedication to teaching the next generation of physicists and astronomers in his work as a full-time physics teacher since 2007.

It is all the more impressive an achievement to pursue cutting-edge science whilst providing such an important service to our community.

For these reasons, Dr Christopher Smith is awarded the Fowler Award for Early Achievement in Geophysics.