

## **RAS George Darwin Lectureship 2021 - Professor Filippo Fraternali**

### **Full citation**

The Royal Astronomical Society's 2021 George Darwin Lectureship is awarded to Professor Filippo Fraternali.

Prof. Fraternali has made major contributions to our understanding of the origin and evolution of galaxies. His work covers both observational data and theoretical modelling, looking at the structure and evolution of galaxies using the powerful techniques made possible by spectral line data cubes. Prof. Fraternali's work led to the development of fountain theory, describing how gas from the intergalactic medium surrounding a galaxy is accreted onto clouds of cool gas which are pushed up from a star-forming disc by supernovae.

This gas later falls back onto the galaxy, bringing with it the accreted gas from the intergalactic medium. This model explains a wide range of observational data across the electromagnetic spectrum relating both to our Galaxy and to other galaxies across a wide range of luminosities.

Prof. Fraternali is known as an extremely clear and engaging speaker and is frequently invited to give talks at major international meetings and conferences. He is therefore well-placed to present exciting developments in extragalactic astronomy to a broad audience.

For these reasons, Professor Filippo Fraternali is awarded the 2021 George Darwin Lectureship.

### **Short citation**

Professor Filippo Fraternali is awarded the George Darwin Lectureship for his work in developing our understanding of how galaxies evolve by accreting material from the intergalactic medium.