

## **Andrew Pontzen: 2020 Gerald Whitrow Lecture**

Professor Andrew Pontzen has conducted exceptionally creative and innovative work in a variety of fields, from the dynamics of galaxy formation and evolution to the dynamics of general relativity and cosmological perturbations, as well as in the studies of the nature of dark matter and dark energy.

His work has led to substantial progress in piecing together the interplay between dark matter, gas, and stars in galaxies. Substantial impact has come from his work on the dynamics of dark matter halos, in particular of the effects of feedback in flattening the inner density profiles of dwarf galaxies, which offers a solution to a long-standing problem of the Cold Dark Matter model.

Professor Pontzen is an excellent public speaker: he is highly sought-after for radio and television interviews, and maintains a high profile in public engagement across a variety of media including about forty appearances on the BBC, several articles for New Scientist, and consultancy for Penguin Random House and the Royal College of Art.

Of particular note, his standing in outreach led him to become part of the Advisory Panel for Cheltenham Science Festival, which develops ideas for events and future directions. This Festival reaches and inspires thousands of people every year. Professor Pontzen also hosted the Guardian's commemorative event for Stephen Hawking in October 2018 at the Royal Institution.

For these reasons, Professor Andrew Pontzen is awarded the Gerald Whitrow Lectureship.

### **Short citation**

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