

## **2021 Harold Jeffreys Lectureship - Dr Sanne Cottaar**

### **Full citation**

Dr Sanne Cottaar is an outstanding researcher into processes in the deep Earth. The intriguing properties of the deep mantle and core can be investigated only by geophysical inference, and she leads a group specialising in deep Earth seismology. She uses seismic methods to infer properties of anomalous zones from low velocity and anisotropy, in the lower mantle and core, both the liquid outer and solid inner core. She helped produce an open-source toolkit for others to explore the thermoelastic behaviour of the Earth – and other planets. An exhibition of her work (supported by the RAS) is currently at the Sedgwick Museum of Cambridge, and partly reproduced online (<http://deepearth.esc.cam.ac.uk>). She received a European Research Council Starting Grant in 2019. She has already been awarded the 2015 Keiiti Aki Young Scientist award, and the 2019 British Geophysical Association Bullerwell Lecture, in which she showed herself to be an excellent speaker. For these reasons Dr Cottaar is awarded the 2021 Harold Jeffreys lectureship.

### **Short citation**

Dr Sanne Cottaar is awarded the 2021 Harold Jeffreys Lectureship for outstanding geophysical research into processes in the Earth's lower mantle and core.