



Royal  
Astronomical  
Society

### **The 2023 Gold Medal for Geophysics is awarded to Professor Timothy Palmer**

Professor Timothy N. Palmer receives the RAS Gold Medal (G) for his outstanding work in advancing the understanding and prediction of medium-term climate and weather phenomena. During the course of his career, he has published over 260 research papers in international peer-reviewed journals (including an astonishing 13 articles in *Nature*), which have attracted over 25,000 citations to date. Arguably his most influential contribution to atmospheric science is the development of ensemble forecasting, something that only became possible with the advent of powerful computers. Professor Palmer developed some of the key algorithms for computing singular vectors that could be used to generate optimal ensembles for characterising forecast uncertainty, and developed the first stochastic parametrisation system for representing model uncertainty in ensemble prediction. A particularly notable aspect of his research is his ability to bridge the gap between theoretical concepts and actual operational weather forecasting.

Professor Palmer's commitment to both the climate community and society at large is reflected in his involvement in the first five IPCC assessment reports, and his co-chairing of the international scientific steering group of the World Climate Research Programme project (CLIVAR) on climate variability and predictability. He was President of the Royal Meteorological Society between 2011-2012, and has served on a number of government committees that examined issues from climate adaptation to the role of science in helping mitigate the humanitarian impact of natural disasters.

For these contributions to science and society, Professor Timothy N. Palmer is awarded the RAS Gold Medal (G).