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Theatre & Studio

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DO TERRESTRIAL GEOMAGNETIC FIELD REVERSALS HAVE AN EFFECT ON THE EARTH'S CLIMATE?

Professor Chris Fogwill FHEA, FRGS, FGS

Pro-Vice Chancellor,

Head of School for Water, Energy and the Environment
Cranfield University

8:00 pm on Wednesday, 7th September 2022
In the Studio Theatre of the LichfieldGarrick

Professor Fogwill obtained his BSc in Geological Oceanography at the University of Bangor and then joined the Department of Earth Sciences at Cambridge University as a postgraduate research assistant in the palaeoceanography group. His PhD at the University of Edinburgh focussed on ice-sheet reconstruction and modelling in Antarctica and Patagonia. He became Senior Lecturer and Director of Programme in Physical Geography at the University of Exeter in 2007. This was followed in 2012 by an Australian Research Council Future Fellowship at the University of New South Wales, Sydney based at the Climate Change Research Centre (CCRC), the leading hub for climate system modelling in the Southern Hemisphere, where he is Adjunct Professor.

Chris's team at Cranfield leads transformative research crucial to sustainable solutions and our global net zero carbon ambitions. A leader in climate science his core academic research has been instrumental in defining the linkages between the Earth's great ice sheets, global climate and sea level during the Anthropocene. This has provided critical insights that have enabled him and his collaborators to improve future projections of our global commitment to understanding sea level rise due to anthropogenic warming, reducing uncertainty and helping to inform on one of the key socioeconomic impacts of climate change.

This presentation will focus on something slightly different, the first climate reconstructions during a major geomagnetic reversal, The Laschamp Event, which occurred some 42,000 years ago. We know from the geological record the Earth's magnetic field changes rapidly, and sometimes completely flips during geomagnetic reversals but understanding the potential environmental, ecological and evolutionary impacts of such extremes have been hard to define. Here we take a look at 'The Adams Event', the last major geomagnetic flip, and given that we are well overdue for a similar event, ask the question what impacts does such an event really have?

For further information, please see our website at www.LSES.org.uk
Students and Members Free.

Visitors £7.00. Tickets are not issued in advance, please pay at the door.

Members must sign in. Those signing in before 7:50 pm will have precedence over all visitors.

This lecture is expected to finish by 9.30 pm.