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Elaborazione a cura del Servizio Comunicazione e Relazioni Esterne | SNS

# JOE TRIBBIA

National Center for Atmospheric Research  
Boulder, Colorado (US)

Sala Seminari  
Centro di Ricerca Matematica  
Ennio De Giorgi  
Collegio Puteano  
Scuola Normale Superiore  
Piazza dei Cavalieri, 3  
56126 Pisa Italy

## *The Mathematical Challenges of Earth System Modelling: Is the Earth System almost-intransitive?*

The seminar will recount the many modelling challenges that arose in the development of NCAR's latest earth system model, CESM2. A persistent problem region in the development versions of CESM2, has been the Labrador Sea which is important as a source for ocean convection that drives the Atlantic Overturning Circulation. The resolution of this problem in CESM2 suggests that the intrinsic dynamics of CESM2 as a complex system is almost intransitive. This would have significant ramifications for climate science.

*This seminar is part of the initiative on climate of the Scuole Universitarie Federate (3CSA)*

**Info**  
crm@sns.it

