AMS-UMI International
Joint Meeting 2024
Palermo, July 23–26, 2024

Analysis, control and inverse problems in climate sciences Special Session B25

Giuseppe Floridia
Sapienza Università di Roma, ITALY
Genni Fragnelli
Università degli Studi della Tuscia, ITALY
Michael Ghil
University of California, Los Angeles, USA
Cristina Urbani
Universitas Mercatorum, ITALY

The ongoing climate emergence and its consequences have emphasized the crucial role of a deep mathematical research on such topic. The fight against climate change, the study and possibly prediction of extreme events, the analysis of potential effects on the enviroment have nowadays attracted significant attention of scientists from a wide range of disciplines. In particular, the investigation of differential equations which describe such phenomena is certainly of fundamental importance: from the definition and analysis of reliable climate models, the study of the dependence on significant parameters, and finally the employment of such models to infer social and enviromental impacts of climate change.

The scope of this special session is to gather experts on the aforementioned subjects in order to present and discuss new mathematical developments on such topics. Our aim is to give an interdisciplinary overview of the problems connected to climate change and the related techniques arising in mathematical and numerical analysis, stochastic calculus, dynamical systems, ODEs and PDEs analysis.

E–mail: cristina.urbani@unimercatorum.it.