ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

16. Applications

1991 MS Classification: 34, 35, 76, 86

Duan, Jinqiao, Clemson University, USA

Dynamical Behavior of Quasigeostrophic Models

Quasigeostrophic models are simplified models for geophysical and environmental flows. Quasigeostrophic stream function or potential vorticity is described by a partial differential equation, while quasigeostrophic fluid particle trajectories satisfy a system of two or three ordinary differential equations. Recent results about periodic quasigeostrophic motion, random quasigeostrophic motion, steady quasigeostrophic motion, as well as quasigeostrophic fluid particle dynamics will be reported.