

Global flows for random SQG

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In this talk we consider the surface quasi-geostrophic equation (SQG) where randomness is injected into the system via the data or a random diffusion term. We discuss invariance of the associated Gibbs measure and global existence of weak solutions in the first case; and ‘regularization by noise’ and existence of pathwise unique global solutions in the second. This is joint work with Pavlovic-Staffilani-Totz and with Buckmaster-Staffilani-Widmayer respectively.