

PARACONTROLLED QUASI-GEOSTROPHIC EQUATION WITH SPACE-TIME WHITE NOISE

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We discuss the stochastic dissipative quasi-geostrophic equation with space-time white noise on the two-dimensional torus. This equation is highly singular and basically ill-posed in its original form. The main objective of this talk is to formulate and solve this equation locally in time in the framework of paracontrolled calculus when the differential order of the main term, the fractional Laplacian, is larger than $7/4$. No renormalization has to be done for this model.