

"Discrete Approximations to singular SPDEs on the full space"

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The theory of paracontrolled calculus is adapted to Bravais lattices. Using ultradistributions and Fourier calculus on Bravais lattices we develop an efficient and flexible mechanism to approximate singular SPDEs on the full space via discretization. As an application we give the first discrete approximation to the parabolic Anderson model on the full plane.