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Periodic homogenization for non-local stable-like operators

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Homogenization has been a very active area of research in both PDE and probability theory for many years. In this talk, we will first review classical results on periodic homogenization for divergence form operators. We will then present our recent results on periodic homogenization for non-local, stable-like operators. Both qualitative and quantitative results will be discussed. Moreover, we will explore quantitative periodic homogenization on bounded domains, where the rate of convergence near the boundary slows down.