Hongjie Dong* (hongjie_dong@brown.edu), 182 George St, Providence, RI 02912-9056, and Timur Yastrzhembskiy. Lp estimates for degenerate Kolmogorov equations.

I will present some recent results about degenerate (ultra-parabolic) Kolmogorov equations (also known as linear Fokker–Planck equations), under the condition that the leading coefficients a^{ij} are measurable in t and VMO in (x, v) with respect to the intrinsic quasi-metric ρ . Such equations appear often in the kinetic theory.

We consider equations in both divergence and non-divergence form and our proof does not rely on any kernel estimates. (Received March 04, 2021)