Texas Tech University. Pure Mathematics Colloquium.
Current Advances in Mathematics.

Theory of partial differential equations in Sobolev spaces: perspectives and developments

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On Zoom. Time: 4:00pm–5:00pm.

ABSTRACT. In this talk, we discuss about ideas, techniques, and results on regularity estimates in Sobolev spaces for solutions of elliptic and parabolic equations. We demonstrate the core ideas in the study by considering the Laplace equations. We then move on to study the class of equations in which the coefficients can be singular or degenerate. Several recent results in my joint work with Hongjie Dong (Brown University) will be reported.)