

Analysis and Applied Mathematics Seminar

Regularity theory for a class of variable-exponent fully nonlinear elliptic equations

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Abstract: In this talk we will explore the regularity of viscosity solutions for a class of variable-exponent, degenerate/singular elliptic equations in non-divergence form. More precisely, we will prove that viscosity solutions to the equation $|Du|^{p(x)}F(D^2u) = f(x)$, where F is a uniformly elliptic operator and p satisfies mild conditions, are locally of class $C^{1,\alpha}$. This is joint work with E. Pimentel (PUC-Rio), G. Rampasso (Unicamp) and E. Teixeira (UCF).

Monday, November 25 at 4:00 PM in 636 SEO