Department of Mathematics
The Chinese University of Hong Kong

數學系
香港中文大學

Seminar

Holder gradient estimates for parabolic homogeneous p-Laplacian equations

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Abstract

We prove interior Holder estimates for the spatial gradient of viscosity solutions to the parabolic homogeneous p-Laplacian equation

$$u_t = |\nabla u|^{2-p} div(|\nabla u|^{p-2}\nabla u),$$

where $1 < p < \infty$. This equation arises from tug-of-war-like stochastic games with noise. It can also be considered as the parabolic p-Laplacian equation in non divergence form. This is joint work with Luis Silvestre.

Date :	November 25, 2016 (Friday)
Time :	4:30pm – 5:30pm
Venue :	Room 222, Lady Shaw Building,
	The Chinese University of Hong Kong

All are Welcome