STATISTICAL EXPONENTIAL FORMULAS FOR GEOMETRIC DIFFUSION

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I will discuss explicit formulas for the solutions of initial-value problems involving the game-theoretic p-Laplacian, for $1 \leq p \leq \infty$; most of the talk will focus on the geometric regime, $1 \leq p < 2$. These elementary formulas rely on the local statistics of these operators, they provide novel descriptions of p-parabolic and p-harmonic functions on both bounded and unbounded domains, and they can be used to define parabolic flows with metric space domains and targets.