DIFFERENTIAL GEOMETRY/PDE SEMINAR

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PADELFORD C-401
10AM–11AM

Geometry of gradient Ricci solitons

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A complete Riemannian manifold (M^n, g) is called a Ricci soliton if its Ricci tensor satisfies the equation $Rc + Hessf = \rho g$, for some constant ρ and smooth function f on M. Here $Hessf$ denotes the Hessian of f.

Ricci solitons are natural extensions of Einstein manifolds. They are self-similar solutions to Hamilton's Ricci flow and often arise as singularity models in the Ricci flow. In this talk, I will discuss geometry of gradient Ricci solitons and survey some recent progress on their classifications.

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