

Curvature flow on symplectic manifolds

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Symplectic geometry has enjoyed tremendous progresses in last two decades, e.g., construction of the Gromov-Witten invariants and their connection to the string theory. Inspired by recent applications of curvature flows in geometry, in particular, Perelman's resolution of the Geometrization conjecture for 3-manifolds by Ricci flow introduced by Hamilton, J. Streets and I introduced a symplectic curvature flow. In this talk, I will discuss recent results on this new flow and show how it can be applied to studying symplectic manifolds.