

# Recent developments in Laplacian flow of $G_2$ structures

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Bryant's Laplacian flow is a geometric flow of closed positive 3-forms on a 7-manifold that aims to give a parabolic PDE approach to constructing Riemannian manifolds with holonomy  $G_2$ . My talk will discuss some recent developments and open questions in this area. Along the way I will try to highlight ways in which Laplacian flow has both some similar and some distinctive features compared to more well-known and better-understood geometric flows, like Ricci flow, mean curvature flow and Lagrangian mean curvature flow.