

Local Ricci Flow and Its Applications

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In this talk we will discuss the local Ricci flow developed by Deane Yang and its applications in geometry. The main result is to show the short-time existence of such flow on a four dimensional metric ball with bounded Ricci curvature and small L^2 -norm of curvature. Here the existence of the flow does not depend on the local Sobolev constant on the metric ball under consideration and thus this result can be applied to the collapsed case.