



## The dynamics of the Ricci flow in homogeneous manifolds

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**Abstract:** Recently, methods of dynamical systems theory have been applied to various problems of differential geometry to study the evolution of flows in compact manifolds. In particular, a related technique was used to demonstrate the Poincaré conjecture. In this talk will be presented a technique that allows to describe the Einstein metrics for homogeneous manifolds using dynamical properties of the system of differential equations whose solution gives the Ricci flow. The focus will be on homogeneous manifolds of isotropy 2 and also for flag manifolds.