

Symmetries, Invariants and Geometric Properties of Nonlinear Parabolic Equations

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Abstract

In this talk, the symmetries and invariants of nonlinear parabolic equations are investigated. It is shown that the geometric property, Harnack inequality and behavior of solutions of the nonlinear parabolic equations are closely related to their symmetries and sign-invariants. Finally, self-similar solutions to a class of affine invariant curve flows are studied.