

Convex Ancient Solutions to the Curve Shortening Flow

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The most natural and intuitive geometric flow to understand is the Curve Shortening Flow which is the one dimensional case of the slightly more complicated Mean Curvature Flow. Studying the CSF allows us to work in a setting which highlights properties of quasilinear parabolic PDEs. It is of particular importance to study the existence and behavior of certain types of solutions. In this talk I will discuss the complete classification of convex ancient solutions to the curve shortening flow in the spirit of Daskalopoulos, Hamilton, and Sesum.