Jeffrey Streets\* (jstreets@uci.edu). Long time existence of minimizing movement solutions of Calabi flow.

In 1982 Calabi proposed studying gradient flow of the  $L^2$  norm of the scalar curvature (now called Calabi flow) as a tool for finding canonical metrics within a given Kahler class. The main motivating conjecture behind this flow (due to Calabi-Chen) asserts the smooth long time existence of this flow with arbitrary initial data. By exploiting aspects of the Mabuchi-Semmes-Donaldson metric on the space of Kahler metrics I will construct a kind of weak solution to this flow, known as a minimizing movement, which exists for all time. (Received September 04, 2013)