Analysis Seminar

Title: Curvature Flows

Speaker: Brendan Guilfoyle (IT Tralee)

Date: Mon 10th June 2019 at 3:00PM

Location: Seminar Room SCN 1.25

Abstract: The evolution of a surface by a given function of its curvatures, termed a curvature flow, arises in a number of areas, such as the erosion of a pebble under abrasion and the smoothing of images, as well as being of mathematical interest as PDE's. In this talk I will present some new ways to visualize curvature flows by considering their evolution in radius of curvature space. Some recent results proving convergence to non-round stationary solutions will be presented and applications to proving the existence of Weingarten surfaces will be indicated.