



Im

Oberseminar Partielle Differentialgleichungen

gibt es am

Donnerstag, dem 5. November 2015,

einen Vortrag von

Dr. Mohammad Najafi Ivaki

(TU Wien)

“Gauss curvature flow”

Beginn: **15.15 Uhr**

Raum: **F 426**

Interessenten sind herzlich willkommen!

R. Denk, R. Racke, O. Schnürer

Abstract: Gauss curvature flow was proposed by Firey as the model for the wear of stones under tidal waves. Assuming the existence, uniqueness, and regularity of the solutions (settled later by K.S. Chou), he proved that if at the start the stone is centrally symmetric, then its ultimate shape is a unit ball. He conjectured that the same conclusion must hold if one starts the flow from any convex surface. Andrews gave an affirmative answer to this question. It remains an interesting question whether or not the ball is the unique ultimate shape of the Gauss curvature flow in higher dimensions. I will talk about the recent progress that have been made to the understanding of the asymptotic behavior of the Gauss curvature flow. In particular, the role of Firey's entropy functional and its stability will be discussed.

(invited by Oliver Schnürer)