

Einladung

In der Reihe „Chemnitzer Mathematisches Colloquium“ der Fakultät für Mathematik der TU Chemnitz spricht

Herr Prof. Dr. Günter Rote (FU Berlin)

über das Thema

Grid Peeling and the Affine Curve-Shortening Flow.

Der Vortrag findet am

**Donnerstag, dem 5. Dezember 2024, um 16:00 Uhr
im Raum B202, Reichenhainer Straße 70**

statt.

Ich möchte Sie hiermit recht herzlich zu dieser Veranstaltung einladen. Das Kolloquium wird von Herrn Prof. Dr. Philipp Reiter und Herrn Prof. Dr. Christoph Helmberg geleitet.

Abstract:

Grid Peeling is the process of taking the integer grid points inside a convex region and repeatedly removing the convex hull vertices. It has been observed by Eppstein, Har-Peled, and Nivasch, that, as the grid is refined, this process converges to continuous process, the Affine Curve-Shortening Flow (ACSF), which deforms the curve based on the curvature.

As part of the M.Ed. thesis of Moritz Rüber, we have investigated the grid peeling process for special parabolas, and we could observe some striking phenomena. As a consequence, we prove this conjecture for one class of curves, parabolas with a vertical axis, and we determine the value of the constant factor in the formula that relates the two processes.

Prof. Dr. Daniel Potts
Dekan