Contribution ID: 19 Type: not specified

A posteriori error control in the max norm for the Monge-Ampère equation

Thursday, 13 June 2024 10:45 (45 minutes)

This talk discusses a stability result for the Monge-Ampère operator in a (potentially regularized) Hamilton-Jacobi-Bellman format as a consequence of Alexandrov's classical maximum principle. The main application is guaranteed a posteriori error control in the L^{∞} norm for the difference of the Monge-Ampère solution and the convex hull of a fairly arbitrary C^1 -conforming finite element approximation.

Presenter: GALLISTL, Dietmar (Universität Jena)