ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

15. Numerical Analysis and Scientific Computing

1991 MS Classification:

Schmelzer, Ilja, WIAS Berlin

Grid Generation With Contravariant Geometry Description

We introduce a new type of geometry description with contravariant behavior. It allows a simple implementation of intersections of geometries, geometries defined by a colored picture, and other simple ways to define and modify geometries which are hard to implement for a geometry description based on boundary grids. We consider algorithms for grid generation based on this type of geometry description. Especially we discuss problems related with anisotropical grid generation and the Delaunay property.