

Computing with trivariate splines on irregular meshes

Jörg Peters
University of Florida
jorg.peters@gmail.com

Defining differentiable spline spaces over irregular hexahedral partitions has applications in modelling as well as solving differential equations. This talk gives an overview of possible approaches, and recent experiments to establish optimal convergence order for the weak formulation of second and fourth-order equations.

Joint work with: Jeremy Youngquist

References

- [1] Jörg Peters Refinable tri-variate C^1 splines for box-complexes including irregular points and irregular edges
Computer Aided Geometric Design, 80:1–21, 2020.