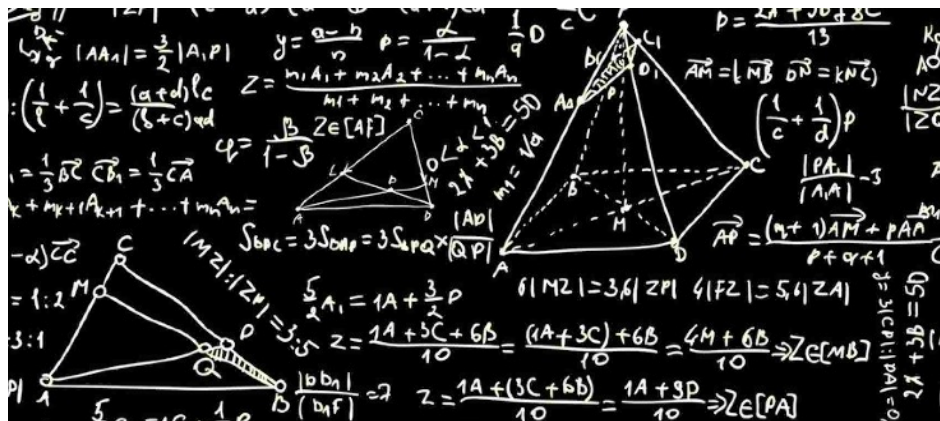NOVEMBER

17

16:45

Mathematik Kolloquium Innsbruck

Etienne Emmrich

Technische Universität Berlin

The Peridynamic Model in Nonlocal Elasticity Theory

Peridynamics is a nonlocal continuum theory which avoids any spatial derivative. It is believed to be suited for the description of fracture and other material failure, and to model multiscale problems. In this talk, we introduce the peridynamic model and discuss several aspects of its mathematical analysis. We review recent results on the existence of solutions to the peridynamic equation of motion for a large class of nonlinear pairwise force functions modeling isotropic microelastic material. Our method of proof applies also to other nonlocal evolution equations.

This is joint work with Dimitri Puhst (TU Berlin).

Donnerstag 17. November 2016, 16:45 Uhr, HS F

Gäste und Studierende sind herzlich willkommen!

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