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Nonlinear Peridynamic Models

Some materials may naturally exhibit singularity phenomena such as cracks or other manifestations as a result of scale effects and long range interactions. Peridynamic theory models such behavior introducing a new nonlocal framework for the basic equations of continuum mechanics. In this lecture we consider a nonlinear peridynamic model and discuss its qualitative properties and well-posedness in suitable fractional Sobolev spaces.

Those results were obtained in collaboration with A. Coclite (Bari), N. Dimola (Milano), S. Dipierro (Perth), G. Fanizza (Casamassima), L. Lopez (Bari), F. Maddalena (Bari), S. F. Pellegrino (Bari), T. Politi (Bari), and E. Valdinoci (Perth).

Ort: Raum 30.02.003 (Mathematik West, 2.Stock)   Zeit: Donnerstag, 13.06.24, 09:30 Uhr

Zu diesem Vortrag laden wir Sie herzlich ein.
You are cordially invited to this lecture.

gez. Prof. Dr. Alfio Borzì
gez. Prof. Dr. Frank Werner