



UNIVERSITÀ DEGLI STUDI
DI TRENTO

Dipartimento di Ingegneria Civile,
Ambientale e Meccanica



Instabilities and nonlocal
multiscale modelling of
materials

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AVVISO DI SEMINARIO

Si comunica che **mercoledì 09 maggio 2018 a partire dalle ore 11.30**
si terranno presso l'aula **D2** (via Mesiano 77) i seguenti seminari

Micromechanics of heterogeneous materials and rough contacting surfaces

Prof. Mark Kachanov

Tufts University, Massachusetts, United States

The following topics will be discussed:

- Proper quantitative characterization of complex microstructures containing defects and inhomogeneities
- Overall properties, elastic and conductive, of such microstructures
- Cross-property elasticity-conductivity connections between the elastic constants and thermal/electric conductivities. They allow monitoring the stiffness loss through electric conductivity. Applications to materials science
- Contact of rough surfaces: Elasticity-conductivity connections and their applications



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Rough contacting plates vs Cracks: similarities and differences in mathematical modeling

Prof. Mark Kachanov

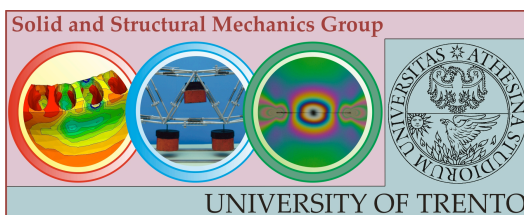
Tufts University, Massachusetts, United States

Rough contacting plates are often confused with traction-free cracks. Both are displacement discontinuity surfaces, however, microstructural parameters that control the magnitude of the discontinuities are entirely different (for rough contacting plates they reflect the statistics of contacts). Both problems will be carefully reviewed.

Tutti gli interessati sono invitati a partecipare.

Il seminario è organizzato dal gruppo di Scienza delle Costruzioni

(D. Bigoni, L. Deseri, N. Pugno, A. Piccolroaz, F. Dal Corso, M.F. Pantano, R. Springhetti, D. Misseroni)



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