



UNIVERSITÀ DEGLI STUDI
DI TRENTO

Dipartimento di Ingegneria Civile,
Ambientale e Meccanica



Instabilities and nonlocal
multiscale modelling of
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AVVISO DI CORSO

Si comunica che **martedì 08 luglio a partire dalle ore 15.00**
si terrà presso la **Sala Conferenze R2** (via Mesiano 77) il seguente seminario

From Volume Interactions to Contact Interactions

Prof. Paolo Podio-Guidugli

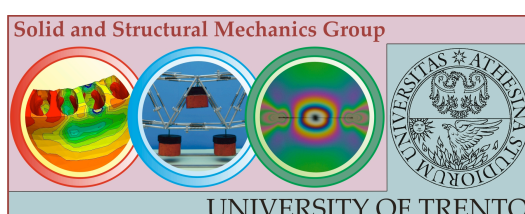
Dipartimento di Ingegneria Civile, Università di Roma TorVergata

Can Continuum Mechanics be validated by Discrete Mechanics, in the sense that the basic objects and principles of the former are shown to be deducible from those of the latter? A crucial issue to tackle with a view to answering this long-standing question is how to interpret the contact interactions typical of CM in terms of distance interactions, the only type of interactions contemplated by DM.

I shall begin by discussing the matters within the framework of Statistical Mechanics, as Irving & Kirkwood did first in their pathbreaking 1950 paper. Then I shall concentrate on Noll's 1955 construction of contact interactions equivalent to given volume-interactions being strongly reminiscent of SM distance interactions. Along the way, I hope that there will be time to address some connected questions, such as the following: a pair of CM and DM constitutive prescriptions is describing the same chunk of matter?

Tutti gli interessati sono invitati a partecipare.

Il seminario è organizzato dal gruppo di Scienza delle Costruzioni
(D. Bigoni, L. Deseri, N. Pugno, M. Gei, F. Dal Corso, A. Piccolroaz, R. Springhetti)



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