



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 20 luglio 2016 a partire dalle ore 15.15**
si terrà presso l'aula **R2** (via Mesiano 77) il seguente seminario

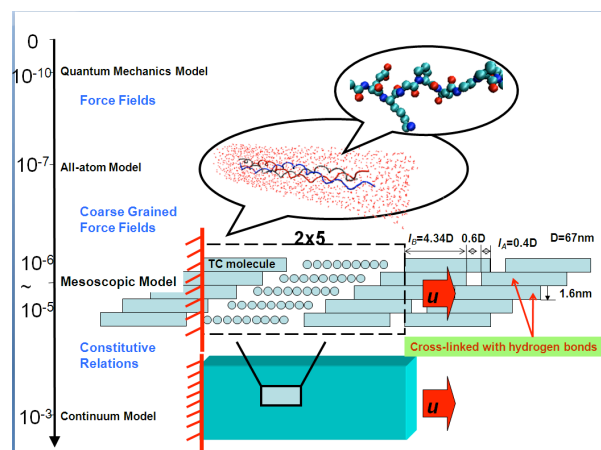
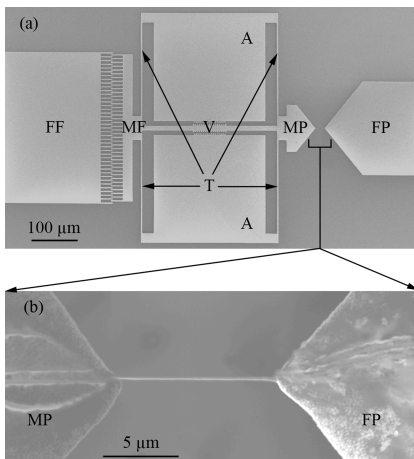
Structural Testing at the Micro and Nano Scales: Breaking Invisible Specimens with Zero Force

Prof. Roberto Ballarini

Thomas and Laura Hsu Professor and Chair

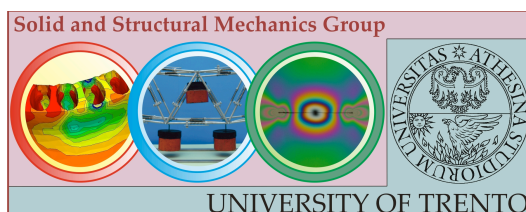
Department of Civil and Environmental Engineering, University of Houston

I will describe how a bunch of clever and hardworking students and research associates have pioneered the use of microelectromechanical systems (MEMS) platforms to measure the mechanical response of materials and structures at the micro and nano scales. Selected examples include measurements of strength, toughness, high cycle and static fatigue of brittle MEMS materials, the strength, ultimate strain capacity and viscoelastic response of individual collagen fibrils, and the fracture energy of the carbon nanotube-epoxy matrix interface. A brief description of several of the (deterministic and stochastic) theoretical and computational models that were inspired by the experimental observations will also be presented.



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)



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