



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 aprile 2016 a partire dalle ore 11.00**
si terrà presso l'aula **R2** (via Mesiano 77) il seguente seminario

Buckling and coiling of a fiber inside a liquid drop

Prof. Sebastien Neukirch

Institut Jean le Rond d'Alembert

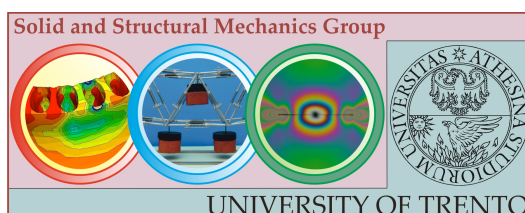
Centre National de la Recherche Scientifique

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Capillary forces acting at the surface of a liquid drop can be strong enough to deform small objects and recent studies have provided several examples of elastic instabilities induced by surface tension. We present such an example where a liquid drop sits on a straight fiber and we show that the liquid attracts the fiber which thereby coils inside the drop. We model the system behavior as a phase transition between a stretched phase, where the drop sits on a straight fiber, and a condensed phase, where the fiber is coiled inside the drop. The force-plateau regime during the transition between the two phases is seen as a Maxwell line, reminiscent of the Martensite-Austenite transition in Shape Memory Alloys.

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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