



UNIVERSITÀ DEGLI STUDI
DI TRENTO

Dipartimento di Ingegneria Civile,
Ambientale e Meccanica



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AVVISO DI SEMINARIO

Si comunica che **venerdì 04 marzo 2015 a partire dalle ore 11.00**
si terrà presso l'aula **R2** (via Mesiano 77) il seguente seminario

Davis' law revisited

Dr. Christian J. Cyron

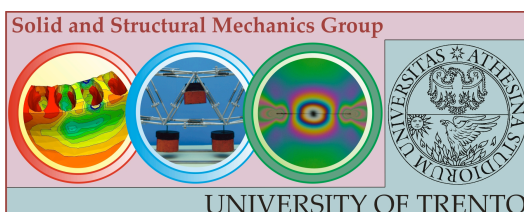
University of Munich

Scholars have been aware of the important link between mechanics and biology at least since Galileo Galilei published his landmark “Discorsi e Dimostrazioni Matematiche Intorno a Due Nuove Scienze” in 1638. For a long time, however, this link was conceptualized as something static. Only in 1867 Henry Gassett Davis postulated that living soft tissue can dynamically adapt to a changing mechanical environment. The famous “Davis’ law”, in which he summarized his observations, may be considered the starting point of modern mechanobiology, an emerging discipline that has attracted rapidly increasing attention over the last two decades and forms an important basis for further advances in bio- and biomedical engineering. Davis law is one of the most fundamental corner stones of modern biomechanics. Nevertheless, it has remained for nearly 150 years but a postulate and it has been unclear how to derive it from more fundamental principles.

In this talk, Davis’ law, the starting point of modern mechanobiology will be revisited and it will be shown how it can be understood now – thanks to most recent advances in biomechanics – as a natural (and mathematically necessary) consequence of two simple objectives pursued by living organisms: continuous repair of fatigue and energetically optimal and stable tissue maintenance.

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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