



UNIVERSITÀ DI PISA

DIPARTIMENTO DI INGEGNERIA STRUTTURALE

Dottorato in Ingegneria delle Strutture

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AVVISO DI SEMINARI

Nell'ambito delle iniziative promosse
dal *Corso di Dottorato in Ingegneria delle Strutture*
e dal curriculum in *Ingegneria Strutturale*
del *Corso di Dottorato in Scienze e Tecniche dell'Ingegneria Civile*,

il **Prof. Paolo Vannucci** dell'*Université de Versailles*

terrà i seguenti due seminari:

martedì 10 luglio alle ore 16:00

The polar method in plane anisotropy

Abstract. The polar method has been introduced by G. Verchery as a tool to find the whole set of independent invariants of a plane tensor. It has been mainly successfully employed to describe some problems in plane anisotropic elasticity. In this seminary, a brief introduction to the polar method is given, along with some general qualitative results concerning plane anisotropy and some problems arising in composite mechanics effectively treated by the polar method.

venerdì 13 luglio alle ore 16:00

The polar method in optimal design of laminates

Abstract. This seminary is devoted to some results concerning the optimal design of laminates obtained by the polar method; firstly, some analytical solutions concerning uncoupling, quasi-homogeneity, isotropy, bending or full orthotropy and piezoelectric in-plane response are presented. Then, a general numerical approach to the optimal design of laminates is presented, based upon the polar method for the theoretical formulation and on a genetic algorithm for the numerical exploration of the feasible domain. Some results are presented to show the effectiveness of the method.

Referenti dell'invito: Paolo S. Valvo & Stefano Bennati.

I seminari saranno tenuti nella sala riunioni al IV piano del DIS.

Pisa, 25 giugno 2007.

Il Coordinatore del Corso di Dottorato
(Prof. Stefano Bennati)