

COLLOQUIUM IN HONOUR OF  
E. SANCHEZ-PALENCIA

**Final program**

**Tuesday June 19th, 2007**

*10h - 10h15      Welcome*

- 10h15 - 10h50      D. Caillerie (Grenoble)

Theoretical and numerical aspects of the modeling of second grade continuous media.

- 10h50 - 11h25      D. Cioranescu (Paris 6)

The unfolding method for multiscale PDE's: application to sieve problems.

- 11h25 - 12h      L. Tartar (Carnegie Mellon, Pittsburgh PA, and Paris 13)

Quelques problèmes d'homogénéisation qui sont liés à des observations curieuses, qui avaient suscité des explications un peu bizarres.

*12h - 14h      Lunch*

- 14h - 14h35      E. Sanchez-Palencia (Paris 6)

Singular perturbations and ill-posed problems.

- 14h35 - 15h10      J. Rappaz (Lausanne)

Mathematical modeling and numerical aspects in aluminum production.

- 15h10-15h45      J. Pitkaranta (Helsinki)

Modeling a shell roof with a stiffening ring: How accurate were the models 65 years ago?

*15h45 - 16h15      Coffee break*

- 16h15 - 16h50      J. Diaz (Madrid)

Higher order parabolic potential formulation of stationary shells with some rigid constraints.

- 16h50 - 17h25      T. Apel (Munich)

Anisotropic finite elements for singularly perturbed model problems.

- 17h25 - 18h00      S. Nicaise (Valenciennes)

Boundary layers for transmission problems with singularities.

*19h15      Buffet*

## **Wednesday June 20th, 2007**

- 9h - 9h35 G. Geymonat (Montpellier)  
Equations de compatibilité de Saint Venant, formule de Cesàro-Volterra et applications à la cinématique des plaques.
- 9h35 - 10h10 A. Raoult (Paris 5)  
Asymptotic modeling of lattices with bar interactions.
- 10h10 - 10h45 G. Panasenko (St Etienne)  
Multi-scale modelling of flows in thin pipe-wise structures: applications to the blood circulation problems.

*10h45 - 11h15 Coffee break*

- 11h15 - 11h50 M. Dauge (Rennes) (coll. S. Tordeux et G. Vial)  
Expansions for self similar perturbations near a corner: Matching versus Multiscale.
- 11h50 - 12h25 P. Suquet (Marseille) (coll. N. Lahellec)  
Homogenization in linear and nonlinear viscoelasticity.

*12h25 - 14h15 Lunch*

- 14h15 - 14h50 J.J. Marigo (Paris 6) (coll. R. Abdelmoula)  
The effective behaviour of the bridged crack.
- 14h50 - 15h25 O. Millet (La Rochelle)  
Computing singular perturbations for shells and adaptive mesh.
- 15h25 - 16h00 D. Leguillon (Paris 6)  
A damage model based on singular elastic fields.