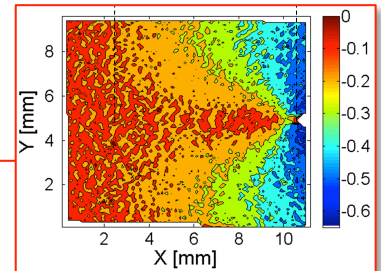


# Flexible Materials/Large Deformations

5 May 2015

<http://fml.d.sciencesconf.org/>

Lecture theatre P at ISTIC  
Rennes – Beaulieu Campus



## Programme

- 8.15** *Registration and coffee*
- 8.45** Introduction
- 9.00** **lecture 1:** "Digital image correlation at large deformations: practical considerations and error assessment"  
P. Lava, D. Debruyne, L. Wittevrongel and S. Coppieters
- 9.30** **lecture 2:** "Problematic of full-field measurements in large deformation: methodology and applications"  
E. Toussaint, X. Balandraud, M. Grédiac, J.-B. Le Cam
- 10.00** **lecture 3:** "Multiaxial deformation around a fatigue crack tip in natural rubber"  
P. Rublon, B. Huneau, E. Verron, N. Saintier, S. Beurrot, A. Leygue, C. Mocuta, D. Thiaudière, D. Berghezan
- 10.30** *Refreshments and exhibition*
- 11.10** **lecture 4:** "The use of DIC for mechanical modeling of localized phenomena under large strain assumption"  
A.-S. Caro Bretelle, P. Lenny, R. Leger
- 11.40** **lecture 5:** "Use of digital image correlation to analyse a membrane bulge test"  
G. Chagnon, G. Machado, D. Favier
- 12.10** *Lunch, exhibitions, posters*
- 14.30** **lecture 6:** "Thermo-mechanical characterisation of polymers for stretching application; experimentation and modelling"  
Noëlle Billon
- 15.00** **lecture 7:** "Reconstruction of strain energy functions in biological membranes from full-field strain measurements"  
S. Avril, F. Davis
- 15.30** **lecture 8:** "The Virtual Fields Method: an efficient tool for material characterization from full-fields measurements"  
Michel Grédiac
- 16.00** **lecture 9:** "Application of VFM at large strains: examples in hyperelasticity and plasticity"  
M. Rossi, F. Pierron, M. Sasso and G. Chiappini
- 16.30** Panel discussion

