Arpino, September 19-23 2016 **Program**

Models of Generalized Continua characterized by Quasi-Inextensible Fibrous Structures: New Ideas for Models and Applications

TIME	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSTDAY	FRIDAY	SATURDAY
9.00-9.45		Dirrenberger	Excursion	Misra	Harrison	Della Corte/Greco	
9.45-10.30		Ganghoffer		Eremeyev	Turco	Lekszycki	
10.30-11.00		Coffe break		Coffe break	Coffe break		
11.30-11.45		dell'Isola		Boisse	Durville		
11.45-12.30		Ganghoffer		Lekszycki	Orgeas		
12.30-14.30		Lunch	Lunch	Lunch	Lunch		
14.30-15.15			dell'Isola	Lekszycki	Placidi		
15.15-16.00			Boisse	Orgeas	Oterkus Selda		
16.00-16.30	Arrival	Coffe break	Coffe break	Coffe break	Coffe break		
16.30-17.15		Dirrenberger	Ganghoffer	Harrison	Gangoffer		
17.15-18		Ganghoffer	Bousselmi	Harrison	d'Angelo/Reda		
Evening				Social dinner			

School of the CNRS International Associate Laboratory Coss&Vita
on
Models of Generalized Continua characterized by Quasi-Inextensible Fibrous Structures: New Ideas for Models and Applications

19-23 September 2016, Arpino, Italy

Titles of Courses

Static and dynamical responses of network and textile materials by dedicated homogenization techniques (about 2.5 hrs).

Jean-Francois Ganghoffer
LEMTA – Université de Lorraine
https://lemta.univ-lorraine.fr/data/pages_pro/J.F.Ganghoffer.pdf

Locking and other difficulties in simulation of composite reinforcements forming. Modeling the développement of defects

Philippe Boisse
LAMCOS, INSA Lyon
http://lamcos.insa-lyon.fr/front/fiche_pers.php?Numpers=292&L=1

FE simulation at micro-scale for the modelling on fibrous materials

Damien Durville
MSSMat Ecole Centrale Paris
http://www.mssmat.ecp.fr/cms/lang/fr/mssmat/DURVILLEDamien

X-ray microtomgraphy, 3D imaging and micromechanics of fibrous materials (2hrs)

Laurent Orgeas
CNRS / Univ. Grenoble Alpes
http://people.3sr-grenoble.fr/users/lorgeas/management.html

Mathematical results in the theory of linear pantographic sheets with a view to nonlinear problems

Victor Eremeyev
Rzeszów University of Technology
http://www.ipme.ru/ipme/labs/mmmm/eremeyev.htm

Some experimental and theoretical results about pantographic sheets: possible applications to metamaterials to be used in biological applications

Tomazs Lekszycki
Warsaw University of Technology
https://www.researchgate.net/profile/Tomasz_Lekszycki

The rise and fall of pantographic lattices in Hellenistic Greek states and their revival in modern times

Francesco dell'Isola
Università degli Studi di Roma La Sapienza and International Research Center M&MoCS
http://www.fdellisola.it/

Mathematical models for pantographic micro-structures and fabrics: numerics, theorems and experiments

Emilio Turco and Francesco dell'Isola
Università degli Studi di Sassari and Università degli Studi di Roma La Sapienza
https://www.uniss.it/ugov/person/834

Towards Comprehensive Characterisation and Modelling of the Forming and Wrinkling Mechanics of Engineering Fabrics

Phillip Harrison
University of Glasgow
http://www.gla.ac.uk/schools/engineering/staff/philipharrison/

Homogenization and RVE sizes for 3D fibrous media

Justin Dirrenberger
PIMM Lab Arts & Métiers-ParisTech
http://pimm.paris.ensam.fr/en/user/336

Granular Micromechanics: Paradigm for continuum modeling of structured media

Anil Misra
University of Kansas
https://ceae.ku.edu/anil-misra

Peridynamic modeling of materials and structures

Selda Oterkus
University of Strathclyde, Glasgow

Identification of pantographic structures with Gedanken experiments

Luca Placidi
Università Internazionale Telematica UNINETTUNO

Pantographic sheets with perfectly inextensible fibers.

Alessandro Della Corte and Leopoldo Greco
Università di Roma La Sapienza and M&MoCS

PhD Students talks

Micropolar chiral models for assemblies of helical fibers

Jonas d'Angelo
LEMTA Université de Lorraine

Microstructural effects in the acoustics of periodic network materials through second order gradient continuum models

Hilal Reda
LEMTA Université de Lorraine

Nonlinear dynamical analysis of 3D textile structures based on second order gradient homogenized media

Yosra Rahali
LEMTA Université de Lorraine