

Rheology of gel networks

combining experimental, computational and theoretical insights

Lyon, France, 21-23 June 2017

INVITED SPEAKERS

- R. Angelini
- J.-L. Barrat
- T. Baumberger
- D. Blair
- M. Bouzid
- M. Caggioni
- R. Castañeda-Priego
- P. Chaudhuri
- L. Cipelletti
- · C. Creton
- T. Divoux
- G. Foffi
- L. Hsiao
- R. Leheny
- G. Luengo
- X. Mao
- G. McKinley
- C. Osuji
- G. Petekidis
- F. Puosi
- L. Ramos
- J. Swan
- J. Van der Gucht
- J. Vermant
- R. Zia



MEETING LOCATION - LYON



AIM OF THE WORKSHOP

The idea of this workshop is to bring together international experts in the field of the dynamics of gel networks, to discuss recent progress and insight from computational, theoretical and experimental approaches. This field is very young especially concerning modeling aspects, due to the computational challenges related to the complex molecular structures which are crucial, in many cases, for relaxation dynamics and mechanical responses on large scales.

In the recent years, however, the computer power and new parallel coding techniques like GPGPU or large scale MPI programming techniques has allowed for significant progress in accessing reasonable time and length scales to address questions that were difficult to tackle before. Also on the experimental side, new approaches combining different techniques (e.g. various types of spectroscopy and rheology) allow for an investigation on a more mesoscopic scale of the complex dynamics, being able to probe scales that can be modeled within, for example, MD simulations. In addition, recent theoretical developments now address specifically the non-linear response of soft materials, providing new concepts and ideas to be tested in experiments and simulations. There seems to be a unique opportunity, at this point, in combining such efforts to develop a new understanding of gels, closely related to their technological applications.

https://gel2017.sciencesconf.org

ORGANIZING COMMITTEE

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