

HORAIRE / *PROGRAM*

**ATELIER : ORDRE PARTIEL DANS LES MATÉRIAUX**  
ANALYSE, SIMULATIONS ET SUJETS CONNEXES

21 au 30 juin 2016

***WORKSHOP: PARTIAL ORDER IN MATERIALS***  
*ANALYSIS, SIMULATIONS AND BEYOND*

*June 21–30, 2016*

**CONFÉRENCES** : salle 1035 (Pavillon J.-Armand-Bombardier)

**PAUSES-CAFÉ** : Atrium (Pavillon J.-Armand-Bombardier)

**JOURNÉES LIBRES** : 24, 25 et 26 juin

**LECTURES**: Room 1035 (Pavillon J.-Armand-Bombardier)

**COFFEE BREAKS**: Atrium (Pavillon J.-Armand-Bombardier)

**FREE DAYS**: June 24, 25 & 26

## Le mardi 21 juin 2016 / *Tuesday, June 21, 2016*

09:00–09:30 Incription et café croissants (Salle Atrium)  
*Registration and Coffee & Croissants (Room Atrium)*

**09:30–10:30 Alejandro Rey** (McGill University)  
*“Biological plywoods: Self-assembly, structure, and surface shapes”*

10:30–11:00 Pause-café / *Coffee break* (Salle / *Room Atrium*)

**11:00–12:00 Jean-Christophe Nave** (McGill University)  
*“Numerical challenges in solving interface and boundary problems on regular Cartesian grids”*

12:00–14:00 Pause-déjeuner / *Lunch break*

**14:00–15:00 Radu Ignat** (Université Paul Sabatier)  
*“Mini-course: Stability of point defects for nematic liquid crystals - I”*

**15:00–16:00 Patricia Bauman** (Purdue University)  
*“Regularity and eigenvalue properties of minimizers for Maier-Saupe energies in liquid crystals”*

16:00–16:30 Pause-café / *Coffee break* (Salle / *Room Atrium*)

**16:30–17:30 Lukas Döring** (RWTH Aachen University)  
*“Hopf solitons in a toy model for ferromagnets”*

**Le mercredi 22 juin 2016 / Wednesday, June 22, 2016**

09:00–09:30 Café croissants / *Coffee & Croissants* (Salle / Room Atrium)

**09:30–10:30 Radu Ignat** (Université Paul Sabatier)  
*“Mini-course: Stability of point defects for nematic liquid crystals - II”*

10:30–11:00 Pause-café / *Coffee break* (Salle / Room Atrium)

**11:00–12:00 Shawn Walker** (Louisiana State University )  
*“A structure preserving discretization for the Ericksen model with colloidal effects and external fields”*

12:00–14:00 Pause-déjeuner / *Lunch break*

**14:00–15:00 Colin Denniston** (University of Western Ontario)  
*“Mini-course: Colloidal aggregates in liquid crystals - I”*

**15:00–16:00 Xavier Lamy** (MPI)  
*“Defects in nematic colloids and surface anchoring”*

16:00–16:30 Pause-café / *Coffee break* (Salle / Room Atrium)

**Le jeudi 23 juin 2016 / Thursday, June 23, 2016**

09:00–09:30 Café croissants / *Coffee & Croissants* (Salle / Room Atrium)

**09:30–10:30 Radu Ignat** (Université Paul Sabatier)  
*“Mini-course: Stability of point defects for nematic liquid crystals - III”*

10:30–11:00 Pause-café / *Coffee break* (Salle / Room Atrium)

**11:00–12:00 Apala Majumdar** (University of Bath)  
*“Uniaxial versus biaxial character of Landau-de Gennes minimizers in three dimensions”*

12:00–14:00 Pause-déjeuner / *Lunch break*

**14:00–15:00 Colin Denniston** (University of Western Ontario)  
*“Mini-course: Colloidal aggregates in liquid crystals - II”*

**15:00–16:00 Buddhapriya Chakrabarti** (Durham University)  
*“Orientational order on curved flexible substrates”*

16:00–16:30 Pause-café / *Coffee break* (Salle / Room Atrium)

**16:30–17:30 Dmitry Golovaty** (The University of Akron)  
*“Dimension reduction for the Landau-de Gennes model of nematic films on surfaces”*

Le lundi 27 juin 2016 / *Monday, June 27, 2016*

09:00–09:30 Inscription et café croissants (Salle Atrium)  
*Registration and Coffee & Croissants (Room Atrium)*

**09:30–10:30 Colin Denniston** (University of Western Ontario)  
*“Mini-course: Colloidal aggregates in liquid crystals - III”*

10:30–11:00 Pause-café / *Coffee break* (Salle / *Room Atrium*)

**11:00–12:00 Daniel Phillips** (Purdue University)  
*“Defects in smectic C liquid crystals”*

12:00–14:00 Pause-déjeuner / *Lunch break*

**14:00–15:00 Oleg Lavrentovich** (Kent State University)  
*“Mini-course: Chromonic and living liquid crystals”*

**15:00–16:00 James Feng** (The University of British Columbia)  
*“Modeling cell intercalation during germ-band extension of *Drosophila* embryo”*

16:00–16:30 Pause-café / *Coffee break* (Salle / *Room Atrium*)

**16:30–17:30 Michael Hagan** (Brandeis University)  
*“Unexpected ordered phases in active matter systems”*

**Le mardi 28 juin 2016 / Tuesday, June 28, 2016**

09:00–09:30 Café croissants / *Coffee & Croissants* (Salle / Room Atrium)

**09:30–10:30 Oleg Lavrentovich** (Kent State University)  
*“Mini-course: Statics and dynamics of colloids in LCs”*

10:30–11:00 Pause-café / *Coffee break* (Salle / Room Atrium)

**11:00–12:00 Dehua Wang** (University of Pittsburgh)  
*“Global existence and regularity of solutions for the active liquid crystal system”*

12:00–14:00 Pause-déjeuner / *Lunch break*

**14:00–15:00 Xiaoyu Zheng** (Kent State University)  
*“Vorticity driven dynamics in nematic liquid crystals”*

**15:00–16:00 Martin Robinson** (University of Oxford)  
*“Bifurcation analysis and multiscale modelling of a bistable liquid crystal device”*

16:00–16:30 Pause-café / *Coffee break* (Salle / Room Atrium)

**16:30–17:30 Rolf Ryham** (Fordham University)  
*“Calculating energy barriers and activation states for steps of fusion”*

**Le mercredi 29 juin 2016 / Wednesday, June 29, 2016**

09:00–09:30 Café croissants / *Coffee & Croissants* (Salle / Room Atrium)

**09:30–10:30 Oleg Lavrentovich** (Kent State University)  
*“Mini-course: Twist-bend liquid crystal structures”*

10:30–11:00 Pause-café / *Coffee break* (Salle / Room Atrium)

**11:00–12:00 Cyrill Muratov** (University Heights, NJIT)  
*“Low density phases in geometric and phase field models of uniformly charged liquids”*

12:00–14:00 Pause-déjeuner / *Lunch break*

**14:00–15:00 Ihsan Ata Topaloglu** (McMaster University)  
*“Small volume fraction limit of a nonlocal isoperimetric problem”*

**15:00–16:00 Apala Majumdar** (University of Bath)  
*“The well order reconstruction solution for nematic liquid crystals”*

16:00–16:30 Pause-café / *Coffee break* (Salle / Room Atrium)

**16:30–17:30 Sourav Mondal** (University of Oxford)  
*“Particle dynamics in nematic liquid flows”*

**Le jeudi 30 juin 2016 / Thursday, June 30, 2016**

09:00–09:30 Café croissants / *Coffee & Croissants* (Salle / Room Atrium)

**09:30–10:30 Daniel A. Beller** (Harvard University)

*“Nematic disclination loops in the presence of sharp-edged colloids and boundaries”*

10:30–11:00 Pause-café / *Coffee break* (Salle / Room Atrium)

**11:00–12:00 Peter Palffy-Muhoray** (Kent State University)

*“Density functional theory for nematics at high densities”*

12:00– Fin de l’atelier / *Closure of the workshop*