

Centre de recherches mathématiques
Université de Montréal

Atelier sur les repères mobiles en géométrie
Du 13 au 17 juin 2011

Workshop on Moving Frames in Geometry
June 13-17, 2011

HORAIRE / *PROGRAM*

Conférences : salle 6214

Pauses-café : salle 6245

Lectures: Room 6214

Coffee Breaks: Room 6245

Le lundi 13 juin 2011 / *Monday, June 13, 2011*

08:30 - 09:00 Inscription / *Registration* (Salle / *Room* 5345)

Café-croissants / *Coffee & Croissants* (Salle / *Room* 6245)

09:00 - 10:00 **Robert Bryant** (University of California at Berkeley)

“Applications of Cartan’s generalization of Lie’s Third Theorem”

10:10 - 10:50 **Irina Kogan** (North Carolina State University)

“Geometry of hyperbolic conservative systems”

10:50 - 11:10 Pause-café / *Coffee break*

(Salle / *Room* 6245)

11:10 - 11:50 **Chuu-Lian Terng** (University of California at Irvine)

“Submanifolds, moving frames, and integrable systems”

12:00 - 13:30 Pause-déjeuner / *Lunch break*

13:30 - 14:10 **Stephen Anco** (Brock University)

“Integrability of geometric evolution equations using classical moving frames”

14:20 - 15:00 **Daniel Fox** (Community College of Philadelphia)

“Killing fields and conservation laws”

15:10 - 16:10 *Discussion*

Le mardi 14 juin 2011 / *Tuesday, June 14, 2011*

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- 08:30 - 09:00** Café croissants / *Coffee & Croissants*
(Salle / Room 6245)
- 09:00 - 10:00** **Jeanne N. Clelland** (University of Colorado)
“Equivalence of geometric structures in control theory via moving frames”
- 10:10 - 10:50** **Nabil Kahouadji** (McGill University)
“Conservation laws and generalized isometric embeddings”
- 10:50 - 11:10** Pause-café / *Coffee break*
(Salle / Room 6245)
- 11:10 - 11:50** **Thomas Ivey** (College of Charleston)
“Small(er) is beautiful: twistor space constructions in submanifold geometry ”
- 12:00 - 13:30** Pause-déjeuner / *Lunch break*
- 13:30 - 14:30** **Keti Tenenblat** (Universidade de Brasilia)
“On Ribaucour transformations for surfaces”
- 14:50 - 15:30** **Robert Milson** (Dalhousie University)
“The IC bound for 4-dimensional, Lorentzian geometry”
- 15:40 - 16:10** *Discussion*
- 18:00** **Dîner / Conference Dinner**
Restaurant “Dev”, (5987, rue Victoria)

Le mercredi 15 juin 2011 / *Wednesday, June 15, 2011*

08:30 - 09:00 Café croissants / *Coffee & Croissants*
(Salle / Room 6245)

09:00 - 10:00 **Andreas Cap** (Universität Wien)
“Holonomy reductions of Cartan connections and invariant differential equations”

10:10 - 10:50 **Konrad Schöbel** (Friedrich-Schiller-Universität Jena)
“Orthogonally separable coordinates on the 3-sphere”

10:50 - 11:10 Pause-café / *Coffee break*
(Salle / Room 6245)

11:10 - 11:50 **Igor Zelenko** (Texas A&M University)
“Geometry of curves in parabolic homogeneous spaces”

12:00 - 13:30 Pause-déjeuner / *Lunch break*

13:30 - 14:10 **Thomas Mettler** (University of California at Berkeley)
“Weyl metrisability for projective surfaces”

14:20 - 15:00 **Colleen Robles** (Texas A&M University)
“Homological rigidity of schubert varieties”

15:10 - 15:50 **Dennis The** (Texas A&M University)
“The Lagrangian Grassmannian, hyperbolic PDE, and G^2 ”

15:55 - 16:20 *Discussion*

Le jeudi 16 juin 2011 / *Thursday, June 16, 2011*

08:30 - 09:00 Café croissants / *Coffee & Croissants*
(Salle / Room 6245)

09:00 - 10:00 **Peter J. Olver** (University of Minnesota)
“Moving frames since 1997”

10:10 - 10:50 **Gloria Mari Beffa** (University of Wisconsin-Madison)
“The pentagram map and its generalizations”

10:50 - 11:10 Pause-café / *Coffee break*
(Salle / Room 6245)

11:10 - 11:50 **Juha Pohjanpelto** (Oregon State University)
“Variational bicomplexes, group actions, and cohomology”

12:00 - 13:30 Pause-déjeuner / *Lunch break*

13:30 - 14:10 **Tania Goncalves** (University of Kent)
“Moving frame methods for solving SE(3) symmetric variational problems”

14:20 - 15:00 **Roman Smirnov** (Dalhousie University)
“Killing tensors and moving frames”

15:10 - 16:10 *Discussion*

Le vendredi 17 juin 2011 / *Friday, June 17, 2011*

08:30 - 09:00 Café croissants / *Coffee & Croissants*
(Salle / Room 6245)

09:00 - 10:00 **Mark Fels** (Utah State University)
“Symmetry reduction of exterior differential systems”

10:10 - 10:50 **Peter John Vassiliou** (University of Canberra)
“Einstein metrics and Darboux-Manakov-Zakharov systems”

10:50 - 11:10 Pause-café / *Coffee break*
(Salle / Room 6245)

11:10 - 11:50 **Robert Thompson** (University of Minnesota)
“Group foliation and moving frames”

12:00 - 13:30 Pause-déjeuner / *Lunch break*

13:30 - 14:10 **Ekaterina Shemyakova** (The University of Western Ontario)
“Connection between scalar and functional invariants for infinite-dimensional regularized moving frame method”

14:20 - 15:00 **Andrea Dziubek** (IUPUI)
“Modeling biomembranes using calculus of variations and exterior calculus”