

Centre de recherches mathématiques  
Université de Montréal

SMS - École d'été 2008 Symétrie et intégrabilité des équations aux  
différences  
Du 9 au 20 juin 2008

*SMS - 2008: Summer School Symmetries and Integrability of Difference  
Equations  
June 9-20, 2008*

**HORAIRE / PROGRAM**

Le lundi 9 juin 2008 / *Monday, June 9, 2008*

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**09:00 - 10:30** Inscription et café croissants / *Registration and Coffee & Croissants*

**10:30 - 11:30** **Alexander Its** (Indiana University-Purdue Indianapolis)  
*"Discrete Painlevé Equations and Random Matrices - I"*

**11:30 - 13:30** Pause déjeuner / *Lunch break*

**13:30 - 14:30** **Basile Grammaticos** (Université de Paris VII)  
*"Discrete Painlevé Equations - I"*

**14:30 - 15:30** **Alexander Its** (Indiana University-Purdue Indianapolis)  
*"Discrete Painlevé Equations and Random Matrices - II"*

**15:30 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00** **Peter J. Olver** (University of Minnesota)  
*"Moving Frames in Applications - I"*

**17:00 - 18:00** **Jiri Patera** (Université de Montréal)  
*"Lie Group Transforms in the Interpolation of Digital Data - I"*

Le mardi 10 juin 2008 / *Tuesday, June 10, 2008*

**09:00 - 10:00 Alexander Its** (Indiana University-Purdue Indianapolis)

*“Discrete Painlevé Equations and Random Matrices - III”*

**10:00 - 10:30** Pause-café / *Coffee break*

**10:30 - 11:30 Alexei Borodin** (Caltech)

*“Isomonodromy Transformations of Linear Difference Equations and Painlevé Hierarchy - I”*

**11:30 - 12:30 Basile Grammaticos** (Université de Paris VII)

*“Discrete Painlevé Equations - II”*

**12:30 - 14:30** Pause déjeuner / *Lunch break*

**14:00 - 15:00 Alexander Its** (Indiana University-Purdue Indianapolis)

*“Discrete Painlevé Equations and Random Matrices - IV”*

**15:00 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00 Peter J. Olver** (University of Minnesota)

*“Moving Frames in Applications - II”*

**17:00 - 18:00 Jiri Patera** (Université de Montréal)

*“Lie Group Transforms in the Interpolation of Digital Data - II”*

**18:00 - 20:00** Cocktail de bienvenue / *Welcoming reception*

Le mercredi 11 juin 2008 / *Wednesday, June 11, 2008*

**09:00 - 10:00 Alexander Its** (Indiana University-Purdue Indianapolis)

*“Discrete Painlevé Equations and Random Matrices - V”*

**10:00 - 10:30** Pause-café / *Coffee break*

**10:30 - 11:30 Alexei Borodin** (Caltech)

*“Isomonodromy Transformations of Linear Difference Equations and Painlevé Hierarchy - II”*

**11:30 - 12:30 Basile Grammaticos** (Université de Paris VII)

*“Discrete Painlevé Equations - III”*

**12:30 - 14:30** Pause déjeuner / *Lunch break*

**14:30 - 15:30 Jiri Patera** (Université de Montréal)

*“Lie Group Transforms in the Interpolation of Digital Data - III”*

**15:30 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00 Peter J. Olver** (University of Minnesota)

*“Moving Frames in Applications - III”*

Le jeudi 12 juin 2008 / *Thursday, June 12, 2008*

**09:00 - 10:00 Pavel Winternitz** (Université de Montréal)

*“Lie Point Symmetries of Difference Equations - I”*

**10:00 - 10:30** Pause-café / *Coffee break*

**10:30 - 11:30 Alexei Borodin** (Caltech)

*“Isomonodromy Transformations of Linear Difference Equations and Painlevé Hierarchy - III”*

**11:30 - 12:30 Basile Grammaticos** (Université de Paris VII)

*“Discrete Painlevé Equations - IV”*

**12:30 - 14:30** Pause déjeuner / *Lunch break*

**14:30 - 15:30 Decio Levi** (Universita' di Roma Tre)

*“Generalized Lie Symmetries of Difference Equations - I”*

**15:30 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00 Peter J. Olver** (University of Minnesota)

*“Moving Frames in Applications - IV”*

**Le vendredi 13 juin 2008 / *Friday, June 13, 2008***

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**09:00 - 10:00 Peter J. Olver** (University of Minnesota)

*“Moving Frames in Applications - V”*

**10:00 - 10:30** Pause-café / *Coffee break*

**10:30 - 11:30 Alexei Borodin** (Caltech)

*“Isomonodromy Transformations of Linear Difference Equations and Painlevé Hierarchy - IV”*

**11:30 - 12:30 Vladimir Dorodnitsyn** (Keldysh Institute of Applied Mathematics)

*“Symmetry Preserving Discretization of Ordinary and Partial Differential Equations - I”*

**12:30 - 14:30** Pause déjeuner / *Lunch break*

**14:30 - 15:30 Decio Levi** (Universita' di Roma Tre)

*“Generalized Lie Symmetries of Difference Equations - II”*

**15:30 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00 Pavel Winternitz** (Université de Montréal)

*“Lie Point Symmetries of Difference Equations - II”*

Le lundi 16 juin 2008 / *Monday, June 16, 2008*

**09:00 - 10:00** **Sergey P. Novikov** (Moscow University)

*“Complete Integrability of Discrete Nonlinear Systems - I”*

**10:00 - 10:30** Pause-café / *Coffee break*

**10:30 - 11:30** **Mourad Ismail** (University of Central Florida)

*“Orthogonal Polynomials and Integrable Systems - I”*

**11:30 - 12:30** **Jarno Hietarinta** (University of Turku)

*“Definitions and Predictions of Integrability for Difference Equations - I”*

**12:30 - 14:30** Pause déjeuner / *Lunch break*

**14:30 - 15:30** **Pavel Winternitz** (Université de Montréal)

*“Lie Point Symmetries of Difference Equations - III”*

**15:30 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00** **Vladimir Dorodnitsyn** (Keldysh Institute of Applied Mathematics)

*“Symmetry Preserving Discretization of Ordinary and Partial Differential Equations - II”*

Le mardi 17 juin 2008 / *Tuesday, June 17, 2008*

**09:00 - 10:00** **Sergey P. Novikov** (Moscow University)

*“Complete Integrability of Discrete Nonlinear Systems - II”*

**10:00 - 10:30** Pause-café / *Coffee break*

**10:30 - 11:30** **Mourad Ismail** (University of Central Florida)

*“Orthogonal Polynomials and Integrable Systems - II”*

**11:30 - 12:30** **Jarno Hietarinta** (University of Turku)

*“Definitions and Predictions of Integrability for Difference Equations - II”*

**12:30 - 14:30** Pause déjeuner / *Lunch break*

**14:00 - 15:30** **Decio Levi** (Universita' di Roma Tre)

*“Generalized Lie Symmetries of Difference Equations - III”*

**15:30 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00** **Vladimir Dorodnitsyn** (Keldysh Institute of Applied Mathematics)

*“Symmetry Preserving Discretization of Ordinary and Partial Differential Equations - III”*



Le mercredi 18 juin 2008 / *Wednesday, June 18, 2008*

**09:00 - 10:00** **Sergey P. Novikov** (Moscow University)

*“Complete Integrability of Discrete Nonlinear Systems - III”*

**10:00 - 10:30** Pause-café / *Coffee break*

**10:30 - 11:30** **Mourad Ismail** (University of Central Florida)

*“Orthogonal Polynomials and Integrable Systems - III”*

**11:30 - 12:30** **Jarno Hietarinta** (University of Turku)

*“Definitions and Predictions of Integrability for Difference Equations - III”*

**12:30 - 14:30** Déjeuner / *Lunch*

**14:30 - 15:30** **Decio Levi** (Universita' di Roma Tre)

*“Generalized Lie Symmetries of Difference Equations - IV”*

**15:30 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00** **Pavel Winternitz** (Université de Montréal)

*“Lie Point Symmetries of Difference Equations - IV”*

**Le jeudi 19 juin 2008 / *Thursday, June 19, 2008***

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**09:00 - 10:00** **Sergey P. Novikov** (Moscow University)

*“Complete Integrability of Discrete Nonlinear Systems - IV”*

**10:00 - 10:30** Pause-café / *Coffee break*

**10:30 - 11:30** **Mourad Ismail** (University of Central Florida)

*“Orthogonal Polynomials and Integrable Systems - IV”*

**11:30 - 12:30** **Jarno Hietarinta** (University of Turku)

*“Definitions and Predictions of Integrability for Difference Equations - IV”*

**12:30 - 14:30** Pause déjeuner / *Lunch break*

**14:30 - 15:30** **Yuri B. Suris** (Technische Universitaet Muenchen)

*“Discrete Differential Geometry - I”*

**15:30 - 16:00** Pause-café / *Coffee break*

**16:00 - 17:00** **Yuri B. Suris** (Technische Universitaet Muenchen)

*“Discrete Differential Geometry - II”*

Le vendredi 20 juin 2008 / *Friday, June 20, 2008*

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- 09:00 - 10:00** **Vladimir Dorodnitsyn** (Keldysh Institute of Applied Mathematics)  
*“Symmetry Preserving Discretization of Ordinary and Partial Differential Equations - IV”*
- 10:00 - 10:30** Pause-café / *Coffee break*
- 10:30 - 11:30** **Mourad Ismail** (University of Central Florida)  
*“Orthogonal Polynomials and Integrable Systems - V”*
- 11:30 - 12:30** **Yuri B. Suris** (Technische Universitaet Muenchen)  
*“Discrete Differential Geometry - III”*
- 12:30 - 14:30** Pause déjeuner / *Lunch break*
- 14:30 - 15:30** **Yuri B. Suris** (Technische Universitaet Muenchen)  
*“Discrete Differential Geometry - IV”*
- 15:30 - 16:00** Pause-café / *Coffee break*
- 16:00 - 17:00** **Yuri B. Suris** (Technische Universitaet Muenchen)  
*“Discrete Differential Geometry - V”*