

Centre de recherches mathématiques
Université de Montréal

Programme thématique “Points rationnels, courbes rationnelles et courbes
entières sur les variétés algébriques”
Du 3 au 28 juin 2013

*Thematic Program on Rational Points, Rational Curves and Entire
Holomorphic Curves on Algebraic Varieties
June 3-28, 2013*

HORAIRE / PROGRAM

Conférences (Pavillon André-Aisenstadt)

3-14 juin : salle 5340

17-28 juin : salle 6214

Pauses-café (Pavillon André-Aisenstadt)

3-14 juin : salle 4361

17-28 juin : salle 6245

Lectures (Pavillon André-Aisenstadt)

June 3-14 : Room 5340

June 17-28 : Room 6214

Coffee Breaks (Pavillon André-Aisenstadt)

June 3-14 : Room 4361

June 17-28 : Room 6245

Le lundi 3 juin 2013 / *Monday, June 3, 2013*

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- 09:00 - 09:30** Inscrition (salle 5345) et café-croissants (salle 4361)
Registration (Room 5345) and Coffee & Croissants (Room 4361)
- 09:30 - 10:30** **Jorge Vitorio Pereira** (IMPA Estrada Dona Castorina)
“Deformation of free morphisms along foliations - I”
- 10:30 - 11:00** Pause-café / *Coffee break*
(Salle / *Room* 4361)
- 11:00 - 12:00** **Jorge Vitorio Pereira** (IMPA Estrada Dona Castorina)
“Deformation of free morphisms along foliations - II”
- 12:00 - 14:00** Pause-déjeuner / *Lunch break*
- 14:00 - 15:00** **Claire Voisin** (École Polytechnique)
“Some recent results on zero-cycles on surfaces - I”
- 15:00 - 15:30** Pause-café / *Coffee break*
(Salle / *Room* 4361)
- 15:30 - 16:30** **Claire Voisin** (École Polytechnique)
“Some recent results on zero-cycles on surfaces - II”

Le mardi 4 juin 2013 / *Tuesday, June 4, 2013*

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:30 - 10:30 **Carlo Gasbarri** (Université de Strasbourg)
“Introduction to diophantine geometry - I”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 4361)

11:00 - 12:00 **Carlo Gasbarri** (Université de Strasbourg)
“Introduction to diophantine geometry - II”

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

14:00 - 15:00 **Gianluca Pacienza** (Université de Strasbourg et CNRS)
“Log bend-and-break”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 4361)

15:30 - 16:00 **Yi Zhu** (University of Utah)
“Arithmetics over function fields”

16:30 - 17:30 Session de travail / *Problem Session*

Le mercredi 5 juin 2013 / *Wednesday, June 5, 2013*

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:30 - 10:30 **Jorge Vitorio Pereira** (IMPA Estrada Dona Castorina)
“Deformation of free morphisms along foliations - III”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 4361)

11:00 - 12:00 **Jorge Vitorio Pereira** (IMPA Estrada Dona Castorina)
“Deformation of free morphisms along foliations - IV”

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

14:00 - 15:00 **Claire Voisin** (École Polytechnique)
“Some recent results on zero-cycles on surfaces - III”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 4361)

15:30 - 16:30 **Claire Voisin** (École Polytechnique)
“Some recent results on zero-cycles on surfaces - IV”

Le jeudi 6 juin 2013 / *Thursday, June 6, 2013*

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:30 - 10:30 **Carlo Gasbarri** (Université de Strasbourg)
“Introduction to diophantine geometry - III”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 4361)

11:00 - 12:00 **Carlo Gasbarri** (Université de Strasbourg)
“Introduction to diophantine geometry - IV”

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

14:00 - 15:00 Session de travail / *Problem Session*

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 4361)

15:30 - 16:00 **Zhiyu Tian** (California Institute of Technology)
“Weak approximation for cubic hypersurfaces”

Le vendredi 7 juin 2013 / *Friday, June 7, 2013*

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:30 - 10:30 **Alexandru Buium** (University of New Mexico)
“Arithmetic differential equations and diophantine geometry”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 4361)

11:00 - 12:00 **Zhi Jiang** (Université Paris-Sud 11)
“Pseudo-effective classes and pushforwards”

Le lundi 10 juin 2013 / *Monday, June 10, 2013*

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- 09:00 - 09:30** Inscription (salle 5345) et café-croissants (salle 4361)
Registration (Room 5345) and Coffee & Croissants (Room 4361)
- 09:30 - 10:30** **Michael Nakamaye** (The University of New Mexico)
“The Theorems of Thue, Siegel, and Roth - I”
- 10:30 - 11:00** Pause-café / *Coffee break*
(Salle / *Room* 4361)
- 11:00 - 12:00** **Michael Nakamaye** (The University of New Mexico)
“The Theorems of Thue, Siegel, and Roth - II”
- 12:00 - 14:00** Pause-déjeuner / *Lunch break*
- 14:00 - 15:00** **Yuri Tschinkel** (New York University)
“Introduction to birational anabelian geometry - I”
- 15:00 - 15:30** Pause-café / *Coffee break*
(Salle / *Room* 4361)
- 15:30 - 16:30** **Yuri Tschinkel** (New York University)
“Introduction to birational anabelian geometry - II”

Le mardi 11 juin 2013 / *Tuesday, June 11, 2013*

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:30 - 10:30 **Paul Vojta** (University of California at Berkeley)
“The Thue-Siegel method in diophantine geometry - I”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 4361)

11:00 - 12:00 **Paul Vojta** (University of California at Berkeley)
“The Thue-Siegel method in diophantine geometry - II”

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

14:00 - 15:00 **Antoine Chambert-Loir** (Université Paris-Sud 11)
“Formes différentielles et courants sur les espaces de Berkovich”
“Differential forms and currents on Berkovich spaces”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 4361)

15:30 - 16:00 Session de travail / *Problem Session*

Le mercredi 12 juin 2013 / *Wednesday, June 12, 2013*

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:30 - 10:30 **Jason Starr** (Stony Brook University)
“From rational curves to rational points over global function fields - I”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 4361)

11:00 - 12:00 **Jason Starr** (Stony Brook University)
“From rational curves to rational points over global function fields - II”

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

14:00 - 15:00 **Damian Brotbek** (Université de Strasbourg)
“Height inequality for surfaces in an abelian variety”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 4361)

15:30 - 16:00 **Lie Fu** (École Normale Supérieure)
“Symplectic automorphisms of the varieties of lines of cubic fourfolds”

16:15 - 17:30 Session de travail / *Problem Session*

Le jeudi 13 juin 2013 / *Thursday, June 13, 2013*

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:30 - 10:30 **Paul Vojta** (University of California at Berkeley)
“The Thue-Siegel method in diophantine geometry - III”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 4361)

11:00 - 12:00 **Paul Vojta** (University of California at Berkeley)
“The Thue-Siegel method in diophantine geometry - IV”

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

14:00 - 15:00 **Jason Starr** (Stony Brook University)
“From rational curves to rational points over global function fields - III”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 4361)

15:30 - 16:30 **Jason Starr** (Stony Brook University)
“From rational curves to rational points over global function fields - IV”

Conférence publique / *Public Lecture*
Pavillon André-Aisenstadt, (Salle / Room 1360)

17:00 - 18:00 **Antoine Chambert-Loir** (Université Paris-Sud 11)
“Donner une forme aux nombres - Une aventure bimillénaire”

Le vendredi 14 juin 2013 / *Friday, June 14, 2013*

09:00 - 09:30 Café croissants / *Coffee & Croissants*
(Salle / Room 4361)

09:30 - 10:30 **Michael Nakamaye** (The University of New Mexico)
“The Theorems of Thue, Siegel, and Roth - III”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 4361)

11:00 - 12:00 **Michael Nakamaye** (The University of New Mexico)
“The Theorems of Thue, Siegel, and Roth - IV”

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

14:00 - 15:00 **JBruno de Oliveira** (University of Miami)
“Products of closed meromorphic differentials”

Le lundi 17 juin 2013 / *Monday, June 17, 2013*

Journée libre / *Free day*

Le mardi 18 juin 2013 / *Tuesday, June 18, 2013*

09:00 - 09:30 Inscription (salle 5345) et café-croissants (salle 4361)
Registration (Room 5345) and Coffee & Croissants (Room 4361)

09:30 - 10:30 **Xavier Roulleau** (Université de Poitiers)
“Canonical surfaces with big cotangent bundle”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / *Room* 6245)

11:00 - 12:00 **Gordon Heier** (University of Houston)
“On positive curvature and the existence of rational curves”

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

14:00 - 14:30 **Yusaku Tiba** (Tokyo Institute of Technology)
“Kobayashi hyperbolic imbeddings into quadric and cubic surfaces”

14:30 - 15:00 À venir / *TBA*

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / *Room* 6245)

15:30 - 16:30 À venir / *TBA*

Le mercredi 19 juin 2013 / Wednesday, June 19, 2013

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

09:30 - 10:30 **Henri Gillet** (University of Illinois at Chicago)
“Higher derivations and fields of definition - I”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 6245)

11:00 - 12:00 **Henri Gillet** (University of Illinois at Chicago)
“Higher derivations and fields of definition - II”

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

14:00 - 15:00 **William A. Cherry** (University of North Texas)
“Open problems & speculation around the analogy between complex function theory and Diophantine approximation”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 6245)

15:30 - 16:00 **Marco Maculan** (Université Paris-Sud 11)
“Geometric Invariant Theory and Roth’s Theorem”

Le jeudi 20 juin 2013 / *Thursday, June 20, 2013*

09:45 - 10:15 Café croissants / *Coffee & Croissants*
(Salle / Room 6245)

10:15 - 11:15 **Damiano Testa** (Warwick university)
“The Büchi K3 surface and its rational points

11:30- 12:00 **Cécile Le Rudulier** (Université de Rennes 1)
“Algebraic points of bounded height and Manin’s Conjecture

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

14:00 - 15:00 **Julien Duval** (Université Paris-Sud 11)
“Value distribution via potential theory - I”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 6245)

15:30 - 16:30 **Julien Duval** (Université Paris-Sud 11)
“Value distribution via potential theory - II”

Le vendredi 21 juin 2013 / *Friday, June 21, 2013*

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

09:30 - 10:30 **Henri Gillet** (University of Illinois at Chicago)
“Higher derivations and fields of definition - III”

10:30 - 11:00 Pause-déjeuner / *Lunch break*
(Salle / Room 6245)

11:00 - 12:00 **Henri Gillet** (University of Illinois at Chicago)
“Higher derivations and fields of definition - IV”

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

14:00 - 15:00 **Julien Duval** (Université Paris-Sud 11)
“Value distribution via potential theory - III”

15:00 - 15:30 Pause-café / *Coffee break*
(Salle / Room 6245)

15:30 - 16:30 **Julien Duval** (Université Paris-Sud 11)
“Value distribution via potential theory - IV”

Le lundi 24 juin 2013 / Monday, June 24, 2013

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- 09:00 - 09:30** Inscription (salle 5345) et café-croissants (salle 6245)
Registration (Room 5345) and Coffee & Croissants (Room 6245)
- 09:30 - 10:30** **Hélène Esnault** (Freie Universität Berlin)
“Rational points and 0-cycles over local fields”
- 10:30 - 11:00** Pause-café / *Coffee break*
(Salle / Room 6245)
- 11:00 - 12:00** **Dan Abramovich** (Brown University)
“Logarithmic curve counts and birational invariance”
- 12:00 - 14:00** Pause-déjeuner / *Lunch break*
- 14:00 - 15:00** **Olivier Debarre** (École normale supérieure)
“Moduli spaces for some Fano manifolds”
- 15:00 - 15:30** Pause-café / *Coffee break*
(Salle / Room 6245)
- 15:30 - 16:30** **Brendan Hassett** (Rice University)
“del Pezzo fibrations and K3 surfaces”

Le mardi 25 juin 2013 / Tuesday, June 25, 2013

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

09:00 - 10:00 **Atsushi Moriwaki** (Kyoto University)
“Adelic divisors on arithmetic varieties”

10:00 - 10:20 Pause-café / *Coffee break*
(Salle / Room 6245)

10:20 - 11:20 **Michael Roth** (Queen’s University)
“Seshadri constants, Diophantine approximation, and Roth’s theorem for arbitrary varieties”

11:30 - 12:30 **Pascal Autissier** (Université Bordeaux I)
“On the nondensity of integral points”

12:30 Après-midi libre / *Free afternoon*

Le mercredi 26 juin 2013 / Wednesday, June 26, 2013

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- 09:00 - 09:30** Café croissants / *Coffee & Croissants*
(Salle / Room 6245)
- 09:30 - 10:30** **Nessim Sibony** (Université Paris-Sud (Orsay))
“Entire curves and rigidity in holomorphic dynamics”
- 10:30 - 11:00** Pause-café / *Coffee break*
(Salle / Room 6245)
- 11:00 - 12:00** **Julien Duval** (Université Paris-Sud 11)
“An almost complex SMT”
- 12:00 - 14:00** Pause-déjeuner / *Lunch break*
- 14:00 - 15:00** **James D. Lewis** (University of Alberta)
“Rational curves, torsion points and normal functions”
- 15:00 - 15:20** Pause-café / *Coffee break*
(Salle / Room 6245)
- 15:20 - 16:20** **Xi Chen** (University of Alberta)
“Density of rational curves on K3 surfaces”
- 16:30 - 17:30** **Ekaterina Amerik** (Higher School of Economics)
“Some remarks about the dynamical Hasse principle”
- 17:30** Cocktail (6245) / *Reception (6245)*

Le jeudi 27 juin 2013 / *Thursday, June 27, 2013*

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

09:30 - 10:30 **Henri Gillet** (University of Illinois at Chicago)
“A very special case of the Bombieri-Lang conjecture in characteristic p ”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 6245)

11:00 - 12:00 **Yuri Bilu** (Université Bordeaux 1)
“Integral points on modular curves”

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

14:00 - 15:00 **Christophe Mourougane** (Université Rennes 1)
“On Calabi families of hyperkähler manifolds”

15:00 - 15:20 Pause-café / *Coffee break*
(Salle / Room 6245)

15:20 - 16:20 **Andreas Höring** (Université Pierre et Marie Curie)
“Minimal models for Kähler threefolds”

16:30 - 17:30 **Michael McQuillan** (IHÉS)
“2-Galois Theory”

Le vendredi 28 juin 2013 / *Friday, June 28, 2013*

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

09:30 - 10:30 **Frédéric Bruno Campana** (Université Henri Poincaré Nancy 1)
“Generic semi-positivity of orbifold cotangent bundles”

10:30 - 11:00 Pause-café / *Coffee break*
(Salle / Room 6245)

11:00 - 12:00 **Gerd-Eberhard Dethloff** (Université de Brest)
“Normal families of meromorphic mappings of several complex variables for moving hypersurfaces in a complex projective space”

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

14:00 - 15:00 **Junjiro Noguchi** (University of Tokyo)
“On the algebraic degeneracy of entire curves”

15:00 - 15:20 Pause-café / *Coffee break*
(Salle / Room 6245)

15:20 - 16:20 **Jörg Winkelmann** (Ruhr-Universität Bochum)
“Order of maps and rationality of the image”

16:30 - 17:30 **Hajime Tsuji** (Sophia University)
“New invariant volume form in complex geometry”