

HORAIRE / *PROGRAM*

ATELIER

ESPACES DE MODULES, SYSTÈMES INTÉGRABLES ET
RÉCURRENCES TOPOLOGIQUES

9 au 13 janvier 2016

WORKSHOP

*MODULI SPACES, INTEGRABLE SYSTEMS, AND TOPOLOGICAL
RECURSIONS*

January 9–13, 2016

Conférences : salle 6254 (Pavillon André-Aisenstadt)

Pauses-café : salon Maurice-L'Abbé (salle 6245, Pavillon André-Aisenstadt)

Lectures: Room 6254 (Pavillon André-Aisenstadt)

Coffee Breaks: Salon Maurice-L'Abbé (Room 6245, Pavillon André-Aisenstadt)

Le samedi 9 janvier 2016 / *Saturday, January 9, 2016*

08:30–09:00 Inscription (salle 5345) et café-croissants (salle 6245)
Registration (Room 5345) and Coffee & Croissants (Room 6245)

09:00–10:00 Bertrand Eynard (CEA Saclay)
“Topological recursion and moduli spaces, a proof of the BKMP conjecture”

10:00–11:00 Michael Shapiro (Michigan State University)
“Integrability in cluster algebra theory”

11:00–11:15 Pause-café / *Coffee break* (Salle / Room 6245)

11:15–12:15 Paul Norbury (University of Melbourne)
“Spectral curves giving rise to Frobenius manifolds”

12:15–14:00 Pause-déjeuner / *Lunch break*

14:00–15:00 Sergei Gukov (Caltech)
“Categorification and the Ising model”

15:00–15:30 Brad Safnuk (Central Michigan University)
“Topological recursion for open intersection numbers”

15:30–16:00 Pause-café / *Coffee break* (Salle / Room 6245)

16:00–16:30 Jinsung Park (Korea Institute for Advanced Study)
“Liouville action functional for punctured Riemann surfaces”

16:30–17:00 Zhengyu Zong (Columbia University)

Le dimanche 10 janvier 2016 / *Sunday, January 10, 2016*

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

09:00–10:00 Marco Bertola (Concordia University and SISSA/ISAS)
“Symplectic geometry on the moduli space of projective structures”

10:00–11:00 Ian P. Goulden (University of Waterloo)
“Pfaffians, the BKP hierarchy, and asymptotics of maps in nonorientable surfaces”

11:00–11:15 Pause-café / *Coffee break* (Salle / Room 6245)

11:15–12:15 Dimitri Zvonkine (Institut de Mathématiques de Jussieu)
“Double ramification cycles”

12:15–14:00 Pause-déjeuner / *Lunch break*

14:00–15:00 Andrea Brini (Université Montpellier 2)
“Quantum topology and curve counting invariants”

15:00–15:30 Yu-Shen Lin (Stanford University)

15:30–16:00 Pause-café / *Coffee break* (Salle / Room 6245)

16:00–16:30 Alexander Aleksandrov (Université de Montréal)
“Kontsevich-Penner matrix model and intersection numbers”

16:30–17:00 Ruifang Song (UC Davis)

Le lundi 11 janvier 2016 / *Monday, January 11, 2016*

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

09:00–10:00 Boris Dubrovin (SISSA)
“On Witten - Kontsevich tau-function and its generalisations”

10:00–11:00 Vincent Bouchard (University of Alberta)
“A super topological recursion”

11:00–11:15 Pause-café / *Coffee break* (Salle / Room 6245)

11:15–12:15 Albrecht Klemm (Universität Bonn)
“Elliptic CY 3-fold, refined BPS states and weak Jacobi Forms”

12:15–14:00 Pause-déjeuner / *Lunch break*

14:00–15:00 Piotr Sulkowski (University of Warsaw)
“Quantum curves and conformal field theory”

15:00–15:30 Andrei Prokhorov (Indiana Univ. - Purdue Univ. Indianapolis)
“Connection problem for the isomonodromic tau-function of the Sine-Gordon reduction of Painlevé-III equation”

15:30–16:00 Pause-café / *Coffee break* (Salle / Room 6245)

16:00–16:30 Guillaume Chapuy (Université Paris Diderot - Paris 7)
“Hurwitz formulas and complex reflection groups ”

Le mardi 12 janvier 2016 / Tuesday, January 12, 2016

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

09:00–10:00 Katrin Wendland (Albert-Ludwigs-Universität Freiburg)
“Simple singularities have an ADE-classification - what’s next?”

10:00–11:00 Andrew Neitzke (The University of Texas at Austin)
“WKB and the conformal limit”

11:00–11:15 Pause-café / *Coffee break* (Salle / Room 6245)

11:15–11:45 Andrew McIntyre (Bennington College)
“Chern-Simons invariant on infinite volume manifolds and Bergman tau function”

11:45–14:00 Pause-déjeuner / *Lunch break*

14:00–15:00 Sergei K. Lando (Higher School of Economics)
“On Dubrovin’s Frobenius structures on Hurwitz spaces”

15:00–15:30 Dustin Ross (University of Michigan)
“Donaldson-Thomas theory and crepant resolutions”

15:30–16:00 Pause-café / *Coffee break* (Salle / Room 6245)

16:00–16:30 Joujin (Jian) Zhou (Tsinghua University)

Le mercredi 13 janvier 2016 / Wednesday, January 13, 2016

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

09:00–10:00 Nicolas Orantin (EPFL)
“Global spectral curves from Dubrovin’s superpotential”

10:00–11:00 John Harnad (Concordia University)
“Weighted Hurwitz numbers, tau-functions and topological recursion”

11:00–11:15 Pause-café / *Coffee break* (Salle / Room 6245)

11:15–12:15 Olivier Marchal (Université Jean Monnet)
“Perturbative expansion of the Painlevé tau-functions and topological recursion”

12:15–14:00 Pause-déjeuner / *Lunch break*

14:00–15:00 Dmitry Zakharov (New York University)
“Bounded, non-vanishing solutions of KdV and a new class of potentials of the Schroedinger operator”

15:00–15:30 Anton Dzhamay (University of Northern Colorado)
“On the Geometry of Difference Painlevé Equations”

15:30–16:00 Café / *Coffee* (Salle / Room 6245)