

Abel Symposium 2016

Computation and Combinatorics in Dynamics, Stochastics and Control

Schedule + Titles + Participants

Abel2016 Schedule	Tuesday 16.08.	Wednesday 17.08.	Thursday 18.08.	Friday 19.08.
	9:00 – 9:45	9:00 – 9:45	9:00 – 9:45	9:00 – 9:45
	Peccati	Hairer	Deift 1	Speicher
	9:50 – 10:35	9:50 – 10:35	9:50 – 10:35	9:50 – 10:35
	Bloch	Manchon	Menous	Biane
	10:40	10:40	10:40	10:40
	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>	<i>Coffee</i>
	11:00 – 11:45	11:00 – 11:45	11:00 – 11:45	11:00 – 11:45
	Sulem	Gubinelli	Gray	Guionnet
	11:50	11:50 – 12:35	11:50	11:50
	<i>Lunch</i>	Yang	<i>Lunch</i>	<i>Lunch</i>
	13:15 – 14:00	Free afternoon Lunch in Guddal Dinner in the Castle	13:15 – 14:00	13:15 – 14:00
	Malham		Foissy	Corwin
	14:05 – 14:50		14:05 – 14:50	14:05 – 14:50
	Li		Murua	Deift 2
	14:55		14:55	14:55
	<i>Coffee</i>		<i>Coffee</i>	<i>Coffee</i>
	15:30 – 16:15		15:30 – 16:15	
	Hu		Bogfjellmo	
	16:20 – 17:05		16:20 – 17:05	
	Benth		Grossman	

Scientific Committee

Elena Celledoni (Trondheim, Norway)
Terry Lyons (Oxford, UK)
Bernt Øksendal (Oslo, Norway)
Frédéric Patras (Nice, France)
Jesús M. Sanz-Serna (Madrid, Spain)

Organizing Committee

Giulia Di Nunno (Oslo, Norway)
Kurusch Ebrahimi-Fard (Madrid, Spain)
Alexander Lundervold (Bergen, Norway)
Hans Munthe-Kaas (Bergen, Norway)
Brynjulf Owren (Trondheim, Norway)
Olivier Verdier (Bergen, Norway)
Antonella Zanna (Bergen, Norway)

Speakers and Titles

Fred Espen BENTH

**Multidimensional Ornstein–Uhlenbeck processes in Hilbert space
– Analysis and application**

Philippe BIANE

Inversions and coinversions in the six-vertex model

Antony BLOCH (François Gay-Balmaz, Tudor S. Ratiu)

**The Clebsch representation in Optimal Control, low rank rigid bodies
and the Neumann Problem**

Geir BOGFJELLMO

The Butcher group as a Lie group

Ivan CORWIN

Integrable probability

Percy DEIFT

Universality in numerical computations with random data. Case studies

Loïc FOISSY

**Extension of the product of a post-Lie algebra and application to the
SISO feedback transformation group**

W. Steven GRAY (Kurusch Ebrahimi-Fard)

**Using the antipode in a combinatorial Hopf algebra to compute
Devlin’s polynomials for Poincaré’s center-focus problem**

Robert GROSSMAN (Richard Larson)

A State Space Realization Theorem for Machine Learning

Massimiliano GUBINELLI

Infinite dimensional rough dynamics

Alice GUIONNET

Discussion around heavy-tailed random matrices

Martin HAIRER

Renormalisation in regularity structures

Yaozhong HU

Density of parabolic Anderson random variable

Xue-Mei LI

Perturbation to Conservation Laws

Simon J. A. MALHAM (Margaret Beck)

Grassmannian flows and their applications

Dominique MANCHON

A review on comodule-bialgebras

Frédéric MENOUS (Frédéric Fauvet, David Sauzin)

Trees and analytic dynamical systems : from algebra to analysis

Ander MURUA (Jesús. M. Sanz-Serna)

Hopf algebra techniques to handle dynamical systems and numerical integrators

Giovanni PECCATI

Limit theorems on Gaussian spaces: general estimates and geometric applications

Roland SPEICHER

Non-commutative rational functions, realizations, and free probability

Agnès SULEM

Generalized Dynkin games and game options in imperfect financial markets

Danyu YANG (Terry Lyons)

Generalized integration along rough paths

Participants

1. Fred Espen Benth (Oslo, Norway)
2. Philippe Biane (Paris, France)
3. Anthony Bloch (Ann Arbor, USA)
4. Geir Bogfjellmo (Gothenburg, Sweden)
5. Elena Celledoni (Trondheim, Norway)
6. Ivan Corwin (New York, USA)
7. Percy Deift (New York, USA)
8. Giulia Di Nunno (Oslo, Norway)
9. Olfa Drouli (Oslo, Norway)
10. Kurusch Ebrahimi-Fard (Madrid, Spain)
11. Gunnar Fløystad (Bergen, Norway)
12. Loïc Foissy (Calais, France)
13. Kristoffer Føllesdal (Bergen, Norway)
14. W. Steven Gray (Norfolk, USA)
15. Robert Grossman (Chicago, USA)
16. Massimiliano Gubinelli (Bonn, Germany)
17. Alice Guionnet (Massachusetts, USA)
18. Hannes Haferkorn (Oslo, Norway)
19. Martin Hairer (Warwick, UK)
20. Yaozhong Hu (Lawrence, Kansas, USA)
21. Xue-Mei Li (Warwick, UK)
22. Alexander Lundervold (Bergen, Norway)
23. Terry Lyons (Oxford, UK)
24. Simon J. A. Malham (Edinburgh, UK)
25. Dominique Manchon (Clermont-Ferrand, France)
26. Frédéric Menous (Paris, France)
27. Hans Munthe-Kaas (Bergen, Norway)
28. Ander Murua (San Sebastian, Spain)
29. Bernt Øksendal (Oslo, Norway)
30. Salvador Ortiz-Latorre (Oslo, Norway)
31. Brynjulf Owren (Trondheim, Norway)
32. Frédéric Patras (Nice, France)
33. Giovanni Peccati (Luxembourg)
34. Frank Proske (Oslo, Norway)
35. Jesús M. Sanz-Serna (Madrid, Spain)
36. Alexander Schmeding (Trondheim, Norway)
37. Roland Speicher (Saarbrücken, Germany)
38. Agnès Sulem (INRIA, Le Chesnay, France)
39. Jon Eivind Vatne (Bergen, Norway)
40. Olivier Verdier (Bergen, Norway)
41. Danyu Yang (Oxford, UK)
42. Antonella Zanna (Bergen, Norway)