

Program

Friday 5 April

11.00-12.00 **Registration** in "Vandrehallen" (Bldg. 1530, 1. floor)

12.00-13.00 **Lunch** in the Mathematics Canteen

13.00-13.10 **Welcome** in Auditorium E

13.10-14.10 **Plenary I** in Auditorium E

Jeremy Gray (The Open University, UK) EMS Distinguished Speaker
On the cusp of the new physics: Henri Poincaré and mathematical physics one hundred years ago

14.10-14.30 Coffee break in "Vandrehallen"

14.30-15.10 **Parallel Sessions I** in Auditorium E, D1, D2, D3, D4 & G1

15.20-16.00 **Parallel Sessions II** in Auditorium E, D1, D2, D3, D4 & G1

16.30-17.30 **Plenary II** in Auditorium E

Uffe Haagerup (Copenhagen University)
Approximation properties for groups and C^ -algebras*

18.30 **Reception** at Aarhus Town Hall

Saturday 6 April

09.30-10.30 **Plenary III** in Auditorium E

Henri Berestycki (CAMS at EHESS, France)
Propagation in non homogeneous media and applications

10.30-11.00 Coffee break in "Vandrehallen"

11.00-11.40 **Parallel Sessions III** in Auditorium D1, D2, D3, D4, G1 & G2

11.50-12.30	Parallel Sessions IV in Auditorium D1, D2, D3, D4, G1 & G2
12.30-13.30	Lunch in the Mathematics Canteen
13.30-14.10	Parallel Sessions V in Auditorium D1, D2, D3, D4, G1 & G2
14.20-15.00	Parallel Sessions VI in Auditorium D1, D2, D3, D4, G1 & G2
15.00-16.00	Poster session & coffee break in "Vandrehallen"
16.00-17.00	Plenary IV in Auditorium E

Herbert Edelsbrunner (IST, Austria)

Geometry, Probability, and Topology Just to Measure Length

18:00-21:00	Conference Dinner in the Mathematics Canteen
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Sunday 7 April

09.30-10.30	Plenary V in Auditorium E
	Carsten Thomassen (Technical University of Denmark) <i>Decompositions and orientations of graphs</i>
10.30-10.40	Poster prize & goodbye in Auditorium E
10.40-11.00	Coffee break in "Vandrehallen"
11.00-11.40	Parallel Sessions VII in Auditorium D1, D2, D3, D4, G1 & G2
11.50-12.30	Parallel Sessions VIII in Auditorium D1, D2, D3, D4, G1 & G2
12.30-13.30	Lunch in the Mathematics Canteen

Parallel Sessions

Parallel Session I – Friday at 14.30-15.10

Aud. D1 (1531-113) Algebra and Number Theory

Michel Waldschmidt (Paris VI) *Diophantine equations, old and new*

Aud. D2 (1531-119) Algebraic Topology

George Raptis (Osnabrück) *Cobordism categories and the A-theory characteristic*

Aud. D3 (1531-215) History of Mathematics

Erhard Scholz (Wuppertal) *Epicyclic models and heliocentrism -- a commentary on pre-Ptolemaic astronomy*

Aud. D4 (1531-219) Quantum and Riemannian Geometry

David Brander (DTU) *Loop groups in geometry and singularities*

Aud. G1 (1532-116) Stochastics and Free Probability

Philippe Biane (Paris-Est Marne-la-Vallee) *Concavification of free entropy and the additivity problem*

Partial Differential Equations and Applications

No Lecture

Parallel Session II – Friday at 15.20-16.00

Aud. D1 (1531-113) Algebra and Number Theory

Nadim Rustom (Copenhagen) *Generators of graded rings of modular forms*

Aud. D2 (1531-119) Algebraic Topology

Michał Adamaszek (Bremen) *Graph-theoretic methods in combinatorial algebraic topology*

Aud. D3 (1531-215) History of Mathematics

Jesper Lützen (Copenhagen) *Impossibility: The Classical Problems*

Aud. D4 (1531-219) Quantum and Riemannian Geometry

Thomas Kragh (Uppsala) *Fibrancy of Symplectic Homology in Cotangent Bundles*

Aud. G1 (1532-116) Stochastics and Free Probability

Ion Nechita (CNRS, Toulouse) *Positive and completely positive maps via free additive powers of probability measures*

Partial Differential Equations and Applications

No Lecture

Parallel Session III – Saturday at 11.00-11.40

Aud. D1 (1531-113) Algebra and Number Theory

Pierre Parent (Bordeaux) *Diophantine approaches of modular curves*

Aud. D2 (1531-119) Algebraic Topology

Angela Klamt (Copenhagen) *Universal operations in higher Hochschild homology*

Aud. D3 (1531-215) History of Mathematics

Frédéric Brechenmacher (Université d'Artois & Ecole polytechnique) *The 1874 controversy between Camille Jordan and Leopold Kronecker*

Aud. D4 (1531-219) Quantum and Riemannian Geometry

Mattias Dahl (KTH, Stockholm) *On the mass of asymptotically hyperbolic manifolds*

Aud. G1 (1532-116) Stochastics and Free Probability

Serban Belinschi (Queen's) *Analytic subordination for free convolutions* Partial

Aud. G2 (1532-122) Differential Equations and Applications

Erik Skibsted (Aarhus) *Decay of bound states of elliptic PDE's*

Parallel Session IV – Saturday at 11.50-12.30

Aud. D1 (1531-113) Algebra and Number Theory

Fabien Pazuki (Bordeaux & Copenhagen) *On a conjecture of Lang and Silverman*

Aud. D2 (1531-119) Algebraic Topology

Sune Precht Reeh (Copenhagen) *Burnside rings and fusion systems*

Aud. D3 (1531-215) History of Mathematics

Colin McLarty (Case Western Reserve) *The two careers of Emmy Noether*

Aud. D4 (1531-219) Quantum and Riemannian Geometry

Hartmut Weiss (LMU Munich) *A flow approach to special holonomy A flow approach to special holonomy*

Aud. G1 (1532-116) Stochastics and Free Probability

Octavio Arizmendi (Saarland) *Free and Boolean Stable Laws*

Aud. G2 (1532-122) Partial Differential Equations and Applications

Snorre Christiansen (Oslo) *Finite element systems of differential forms*

Parallel Session V – Saturday at 13.30-14.10

Aud. D1 (1531-113) Algebra and Number Theory

Dmitry Badziahin (Durham) *Badly approximable points on manifolds*

Aud. D2 (1531-119) Algebraic Topology

John Foley (Copenhagen) *Kac-Moody groups via homotopy*

Aud. D3 (1531-215) History of Mathematics

Renaud Chorlay (Paris IV) *Bourbaki's reception of Elie Cartan's work*

Aud. D4 (1531-219) Quantum and Riemannian Geometry

William Kirwin (Cologne) *Momentum Space for Compact Lie Groups*

Aud. G1 (1532-116) Stochastics and Free Probability

Francois Baccelli (INRIA & ENS) *Capacity and Error Exponents of Stationary Point Processes under Random Additive Displacements*

Aud. G2 (1532-122) Partial Differential Equations and Applications

Mathieu Lewin (CNRS & Cergy-Pontoise) *Derivation of Hartree's theory for generic mean-field Bose gases*

Parallel Session VI – Saturday at 14.20-15.00

Aud. D1 (1531-113) Algebra and Number Theory

Lillian Pierce (Oxford) *Counting rational points on smooth cyclic covers*

Aud. D2 (1531-119) Algebraic Topology

Rosona Eldred (Hamburg) *Always-cartesian cubes and wrong-way maps*

Aud. D3 (1531-215) History of Mathematics

Frédéric Jaëck (SPHERE, CNRS) *Operations in Functional Analysis*

Aud. D4 (1531-219) Quantum and Riemannian Geometry

Johan Martens (Aarhus) *Compactifications of reductive groups, non-abelian symplectic cutting and geometric quantisation of non-compact spaces*

Aud. G1 (1532-116) Stochastics and Free Probability

Markus Kiderlen (Aarhus) *Can Random Sets Help to Assess Precision of Local Algorithms in Image Analysis?*

Aud. G2 (1532-122) Partial Differential Equations and Applications

Assyr Abdulle (Lausanne) *Analysis of a multiscale method for quasilinear elliptic homogenization problems*

Parallel Session VII – Sunday at 11.00-11.40

Aud. D1 (1531-113) Algebra and Number Theory

Stephen Harrap (Aarhus) *Mixed' problems in Diophantine approximation*

Aud. D2 (1531-119) Algebraic Topology

Hubert Wagner (Jagiellonian University & IST Austria) *Persistent homology in text mining*

Aud. D3 (1531-215) History of Mathematics

Norbert Schappacher (IRMA) *On the history of mathematics in the 1930s*

Aud. D4 (1531-219) Quantum and Riemannian Geometry

Graeme Segal (Oxford) *TBA*

Aud. G1 (1532-116) Stochastics and Free Probability

Susanne Ditlevsen (Copenhagen) *Only through perturbation can relaxation times be estimated*

Aud. G2 (1532-122) Partial Differential Equations and Applications

Anna-Karin Tornberg (KTH, Stockholm) *Accelerated boundary integral simulations*

Parallel Session VIII – Sunday at 11.50-12.30

Aud. D1 (1531-113) Algebra and Number Theory

Flemming von Essen (Copenhagen) *A Distribution Result Related to Automorphic Forms*

Aud. D2 (1531-119) Algebraic Topology

Ulrich Bauer (IST Austria) *Homological reconstruction and simplification*

Aud. D3 (1531-215) History of Mathematics

Tinne Hoff Kjeldsen (Roskilde) *The shaping of a theory of systems of linear inequalities in the 20th century: Contexts, aims and views of mathematics*

Aud. D4 (1531-219) Quantum and Riemannian Geometry

Rinat Kashaev (Geneve) *Edge state integrals on shaped triangulations*

Aud. G1 (1532-116) Stochastics and Free Probability

Fred Esben Benth (Oslo) *The stochastics of energy markets*

Aud. G2 (1532-122) Partial Differential Equations and Applications

Michael Vogelius (Rutgers) *Approximate Electromagnetic Cloaking*