Finnish Mathematical Days 2018

Main talks in room M100

Benoît Perthame - Tumor growth: from compressible models to

* abstract: <http://integraali.com/math-days/main/1.PNG>
* video 1: <https://www.youtube.com/watch?v=Qx1c34U4kYc>

Odo Diekmann - Delay equations in biological context

* abstract: <http://integraali.com/math-days/main/2.PNG>
* video 1: <https://www.youtube.com/watch?v=fcVyzb33oHU>

Pauliina Ilmonen - On typicality of functional observations

* abstract: <http://integraali.com/math-days/main/3.PNG>
* video 1: <https://www.youtube.com/watch?v=u6I2tuxFnBY>

Brett Wick - The Corona Theorem

* abstract: <http://integraali.com/math-days/main/4.PNG>
* video 1: <https://www.youtube.com/watch?v=45tL6CvtYek>

Anne-Maria Ernvall-Hytönen - Measuring in transcendental number theory

* abstract: <http://integraali.com/math-days/main/5.PNG>
* video 1: <https://www.youtube.com/watch?v=BuiRaG11KLk>
* video 2: <https://youtu.be/X6T6l7XzbFk?t=4m49s>
* video 3: <https://www.youtube.com/watch?v=-oprgdEKX5o>
* video 4: <https://www.youtube.com/watch?v=6gWmQLyVqgw>

Jarkko Kari - An Algebraic Geometric Approach to Multidimensional Symbolic Dynamics

* abstract: <http://integraali.com/math-days/main/6.PNG>
* video 1: <https://www.youtube.com/watch?v=6pJs2uFUKbA>
* video 2: <https://youtu.be/6gWmQLyVqgw?t=19m21s>
* video 3: <https://www.youtube.com/watch?v=JiVBxxfjiDQ>
* video 4: <https://www.youtube.com/watch?v=WtNwS7UA2eE>

M100- Mathematical biologia I

* Planar S-Systems

Josef Hofbauer (University of Vienna)

* A universal classification for discrete-time competitive systems via the carrying simplex

MatsGyllenberg (University of Helsinki)

* Numerical bifurcation analysis of nonlinear delay equations for biology

Francesca Scarabel (University of Helsinki)

* abstracts: <http://integraali.com/math-days/sessions/m100/m100-1-MathematicalBiologyI.pdf>
* video 1: <https://www.youtube.com/watch?v=9q7En2QJTmc>

M100- Mathematical biologia II

* Intercity influenza - how does gravity work?

Julia Gog (University of Cambridge)

* Nested dynamics and parasite evolution

Mircea T. Sofonea (CEFE (CNRS), Montpellier)

* Mathematics of biodiversity

Géza Meszéna (Eötvös University)

* abstracts: <http://integraali.com/math-days/sessions/m100/m100-2-MathematicalBiologyII.pdf>
* video 1: <https://www.youtube.com/watch?v=cJ4B3nI3Nkg>

M100- Mathematical biologia III

* The Kimura Equation

Fabio Chalub (Universidade Nova de Lisboa)

* Attractive-repulsive models in collective behavior and applications

José Antonio Carrillo (Imperial College London)

* Density-dependent diffusion and pattern formation

Stefan Geritz (University of Helsinki)

* abstracts: <http://integraali.com/math-days/sessions/m100/m100-3-MathematicalBiologyIII.pdf>
* video 1: <https://www.youtube.com/watch?v=Vt8lssT4l-k>

M100-Mathematical biologia IV

* An extension of the classification of evolutionarily singular strategies in Adaptive dynamics

Barbara Boldin (University of Primorska)

* The effect of spatial heterogeneity on evolution in spatial models

Kalle Parvinen(University of Turku)

* Evolutionary suicide of prey: Matsuda and Abrams’ model revisited

Eva Kisdi (University of Helsinki)

* abstracts: <http://integraali.com/math-days/sessions/m100/m100-4-MathematicalBiologyIV.pdf>
* video 1: <https://www.youtube.com/watch?v=xCUUr5yGYkc>

M107-Industrial mathematics

* A European Technology Platform for MSO

Wil Schilders (Eindhoven University of Technology)

* Platform for Modelling Education and Industrial Math

Matti Heiliö (Lappeenranta University of Technology)

* Improvement of satellite orbit prediction accuracy with deep learning

Jaakko Pihlajasalo (Tampere University of Technology)

Simo Ali-Löytty (Tampere University of Technology)

* Bayesian data fusion of airborne, space-borne and ground-based observations for forest map production

Tuomo Kauranne (Lappeenranta University of Technology)

* abstracts: <http://integraali.com/math-days/sessions/m107/m107-1-IndustrialMathematics.pdf>
* video 1: <https://www.youtube.com/watch?v=7ixIjvALSNE>

M107- Discrete mathematics

* Cellular Automata and Powers of p/q

Johan Kopra (University of Turku)

* Identification in the Cartesian Product of Three Complete Graphs

Tuomo Lehtilä (University of Turku)

* On the k-Abelian Equivalence Relation on Finitely Generated Free Monoids

Markus Whiteland (University of Turku)

* abstracts: <http://integraali.com/math-days/sessions/m107/m107-2-DiscreteMathematics.pdf>
* video 1: <https://www.youtube.com/watch?v=FIDu9fDiN64>

M107- Number theory I

* On the Riemann-von Mangoldt formula for Selberg class functions

Neea Palojärvi (Åbo Akademi University)

* On the logarithmic Chowla conjecture

Joni Teräväinen (University of Turku)

* A method to compute the bad reduction of Shimura curves

Laia Amorós (Aalto University)

* abstracts: <http://integraali.com/math-days/sessions/m107/m107-3-NumberTheoryI.pdf>
* video 1: <https://www.youtube.com/watch?v=GiSAUH2E6l8>

M107- Number theory II

* On short sums involving Fourier coefficients of cusp forms

Jesse Jääsaari (University of Helsinki)

* On the secrecy function conjecture

Esa Vesalainen(Åbo Akademi)

* Grassmann algebra in transcendence

Tapani Matala-aho(University of Oulu)

* abstracts: <http://integraali.com/math-days/sessions/m107/m107-4-NumberTheoryII.pdf>
* video 1: <https://www.youtube.com/watch?v=It2lRLb4pQk>

M103-Partial differential equations

* Regularity properties for elliptic equations in non-divergence form

Amal Attouchi (University of Jyväskylä)

* Hölder continuity in time for linear parabolic systems

Olli Saari (University of Bonn)

* C1,α-regularity of p-laplace equation in the Heisenberg Group

Shirsho Mukherjee (University of Jyväskylä)

* abstracts: <http://integraali.com/math-days/sessions/m103/m103-4-PartialDifferentialEquations.pdf>
* video 1: <https://www.youtube.com/watch?v=hJI5LJk6Mgw>
* video 2: <https://www.youtube.com/watch?v=JBJl4I7YrlU>
* video 3: <https://www.youtube.com/watch?v=oVWX8BhYM10>
* video 4: <https://www.youtube.com/watch?v=sTvDv70De1M>