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