

ARRANGEMENTS OF HYPERPLANES
Algebra, Combinatorics, Geometry and Topology

Centro Stefano Franscini, Ascona, Switzerland

May 16 – May 20, 2005

PROGRAM

Monday, May 16

- 09.15-10.00** **Toshitake Kohno** (University of Tokyo)
Resonance at infinity and the space of conformal blocks
- 10.00** **Coffee break**
- 10.30-11.15** **Alexander Varchenko** (University of North Carolina)
*Critical points of master functions, multiple orthogonal polynomials,
and a counterexample to the Gaudin Bethe Ansatz conjecture*
- 11.30-12.00** **Sonja Čukić** (KTH Stockholm)
Topology of Graph Coloring Complexes
- 12.15** **Lunch**
- 14.00-14.45** **Bernd Sturmfels** (UC Berkeley)
Combinatorial secant varieties
- 15.00-15.45** **Ehud de Shalit** (Hebrew University)
P-adic hyperplane arrangements and harmonic analysis on buildings
- 15.45** **Coffee break**
- 16.15-17.00** **Alexandru Dimca** (University of Nice)
Geometry of polynomial mappings transversal to infinity
- 17.15-17.45** **Péter Csorba** (ETH Zurich)
The universality and other properties of homomorphism complexes
- 19.00** **Dinner**

Tuesday, May 17

- 09.15-10.00** **Mario Salvetti** (Università di Pisa)
On the homology of complexes associated to poset diagrams and applications
- 10.00** **Coffee break**
- 10.30-11.15** **Igor Dolgachev** (University of Michigan)
Sheaves of logarithmic differentials
- 11.30-12.00** **Emanuele Delucchi** (ETH Zurich)
Subdivision of complexes of k -trees
- 12.15** **Lunch**
- 14.00-14.45** **Daniel C. Cohen** (Louisiana State University)
Gauss-Manin connection for arrangements
- 15.00-15.45** **Frank-Olaf Schreyer** (Universität des Saarlandes)
Computing the higher direct image of a coherent sheaf
- 15.45** **Coffee break**
- 16.15-16.45** **Max Wakefield** (University of Oregon)
Complete intersection apolar algebras
- 19.00** **Dinner**

Wednesday, May 18

- 09.15-10.00** **Eric Babson** (University of Washington)
Graph bundles
- 10.00** **Coffee break**
- 10.30-11.15** **Stefan Papadima** (Romanian Academy)
Equivariant chain complexes and twisted homology
- 11.30-12.00** **Alexander Engström** (ETH Zurich)
Complexes of directed forests
- 12.15** **Lunch**
- afternoon** **Excursion** to the Brissago Islands,
or panorama **hike** in the hills above Ascona.
- 19.00** Departure for the **conference dinner** from Monte Verità

Thursday, May 19

- 09.15-10.00 Michael Falk** (Northern Arizona University)
Multi-nets, resonant weights, and pencils of curves
- 10.00 Coffee break**
- 10.30-11.15 Kwai-Man Fan** (National Chung Cheng University)
Some notes on the fundamental group of the complement of an arrangement of complex hyperplanes
- 11.30-12.00 Silvano Baggio** (Università di Bologna)
Two applications of sheaves on simplicial complexes
- 12.15 Lunch**
- 14.00-14.45 Alexander Suciu** (Northeastern University)
Free partially commutative groups and Lie algebras
- 15.00-15.45 Masahiko Yoshinaga** (Kyoto University)
The Lefschetz theorem and hyperplane arrangements
- 15.45 Coffee break**
- 16.15-17.00 Yukihiro Kawahara** (Tokyo Metropolitan University)
On the construction of arrangements with the non-vanishing twisted cohomology
- 17.15-17.45 Takuro Abe** (Kyoto University)
Freeness of arrangements and an endomorphism sheaf on the intersection lattice
- 19.00 Dinner**

Friday, May 20

- 09.15-10.00 Paulo Lima-Filho** (Texas A&M University)
On the holonomy Lie algebra of graphic arrangements
- 10.00 Coffee break**
- 10.30-11.15 Giovanni Gaiffi** (Scuola Normale Superiore, Pisa)
Models of arrangements and polytopes
- 12.15 Lunch**