

PARTICIPANTS AND SCIENTIFIC PROGRAM

Peter Akhmetiev (IZMIRAN, Russian Academy of Sciences, Russia)
Samer Al Ghour (Jordan University, Jordan)
Ole Andersson (Uppsala University, Sweden)
Andrés Ángel (Stanford University, USA)
Vigleik Angeltveit (University of Chicago, USA)
Sergey Antonyan (National University of Mexico, Mexico)
Boris Apanasov (University of Oklahoma, USA and Russian Academy of Sciences, Russia)
David Ayala (Stanford University, USA)
Malkhaz Bakuradze (Razmadze Mathematical Institute, Georgia)
Jonathan Ariel Barmak (Universidad de Buenos Aires, Argentina)
Somnath Basu (SUNY Stony Brook, USA)
Khaled Bataineh (Jordan University, Jordan)
Johan Björklund (Uppsala University, Sweden)
David Blanc (University of Haifa, Israel)
Zbigniew Błaszczyk (Nicolaus Copernicus University, Poland)
Bogdan Bojarski (Polish Academy of Sciences, Poland)
Dmitry Bolotov (Institute for Low Temperature Physics, Kharkov, Ukraine)
William Browder (Princeton University, USA)
Martin Čadek (Masaryk University, The Czech Republic)
Weimin Chen (University of Massachusetts, Amherst, USA)
Alexey Chernavsky (Moscow State University, Russia)
Pokman Cheung (Massachusetts Institute of Technology, USA)
Ralph Cohen (Stanford University, USA)
Hellen Colman (Wilbur Wright College, USA)
Cynthia Curtis (The College of New Jersey, USA)
Marilyn Daily (Max-Planck-Institut, Germany)
Gabriel C. Drummond-Cole (SUNY Stony Brook, USA)
Alexander Fel'shtyn (Boise State University, USA and Szczecin University, Poland)
Stefan Friedl (Université du Québec à Montréal, Canada)
Kim Frøyshov (University of Bielefeld, Germany)
Mikio Furuta (University of Tokyo, Japan)
Søren Galatius (Stanford University, USA)
Jeffrey Giansiracusa (IHES, France)

Elena Glushak (Balt-audit-expert Co Ltd., Russia)
Hiroshi Goda (Tokyo University of Agriculture and Technology, Japan)
Véronique Godin (Harvard University, USA)
Marek Golasiński (Nicolaus Copernicus University, Poland)
Francisco Gómez Ruiz (Malaga University, Spain)
Mark Grant (Durham University, United Kingdom)
Bogusław Hajduk (Wrocław University, Poland)
Stefan Haller (University of Vienna, Austria)
Liz Hanbury (National University of Singapore, Singapore)
Bernhard Hanke (Universität München, Germany)
Friedrich Hegenbarth (Milano University, Italy)
Andre Henriques (Westfälische Wilhelms-Universität, Germany)
Norio Iwase (Fukuoka University, Japan)
Jan Jaworowski (Indiana University, USA)
Tornike Kadeishvili (Razmadze Mathematical Institute, Georgia)
Uwe Kaiser (Boise State University, USA)
Ralph Kaufmann (Purdue University, USA)
Maxim Kazarian (Moscow Independent University, Russia)
Ulrich Koschorke (Siegen University, Germany)
Robin Koytcheff (Stanford University, USA)
Anssi Lahtinen (Stanford University, USA)
Gabor Lippner (Renyi Institute of Mathematics, Hungary)
Sergiy Maksymenko (Institute of Mathematics, NAS of Ukraine, Ukraine)
Vassily Olegovich Manturov (Moscow State Regional University, Russia)
Elke Markert (Universität Bonn, Germany)
Sergey Melikhov (Steklov Mathematical Institute, Russia)
Dariusz Miklaszewski (Nicolaus Copernicus University, Poland)
Micah Miller (CUNY Graduate Center, USA)
Dmitry Millionshchikov (Moscow State University, Russia)
Elias Gabriel Minian (Universidad de Buenos Aires, Argentina)
Takayuki Morifuji (University of Tokyo, Japan)
Vladimir Nezhinskij (Herzen State Pedagogical University, Russia)
Hiroshi Ohta (Nagoya University, Japan)
Kaoru Ono (Hokkaido University, Japan)
Andrei Pajitnov (Nantes University, France)
Krzysztof Pawałowski (Adam Mickiewicz University, Poland)
Cornel Pinteá ('Babes-Bolyai' University, Cluj-Napoca, Romania)
Leonid Plachta (University of Gdańsk, Poland and IAPMM of NASU, Ukraine)
Semen Podkorytov (Steklov Mathematical Institute, St. Petersburg, Russia)
Katherine Poirer (CUNY Graduate Center, USA)
Eugene Polulyakh (Ukrainian National Academy of Science, Ukraine)
Volker Puppe (University of Konstanz, Germany)
Oscar Randal-Williams (Oxford University, United Kingdom)

Nathaniel Rounds (SUNY Stony Brook, USA)
Yuli Rudyak (University of Florida, USA)
Krzysztof Rykaczewski (Nicolaus Copernicus University, Poland)
Paolo Salvatore (University of Rome Tor Vergata, Italy)
Nikolai Saveliev (University of Miami, USA)
Samir Shah (CUNY Graduate Center, USA)
Vladimir Sharko (Institute of Mathematics, NAS of Ukraine, Ukraine)
Nadya Shirokova (Stanford University, USA)
Daniel Silver (University of South Alabama, USA)
Evgeny Sklyarenko (Moscow State University, Russia)
Arkadiy Skopenkov (Moscow State University and
The Independent University of Moscow, Russia)
Mikhail Skopenkov (Moscow State University, Russia)
Vladimir Smirnov (Moscow State Pedagogical University, Russia)
Ross Staffeldt (New Mexico State University, USA)
Andrew Stimpson (SUNY Stony Brook, USA)
Stephan Stolz (University of Notre Dame, USA)
Dennis Sullivan (SUNY Stony Brook and CUNY Graduate Center, USA)
Michael Sullivan (University of Massachusetts, Amherst, USA)
Andreas Szücs (Hungarian Eötvös Loránd University, Hungary)
Peter Teichner (University of California, Berkeley, USA)
Andrei Teleman (Université de Provence, Marseille, France)
John Terilla (CUNY Graduate Center, USA)
Tamás Terpai (ELTE, Hungary)
Svjetlana Terzic (University of Montenegro, Crna Gora)
Thomas Tradler (CUNY College of Technology, USA)
Masaaki Ue (Kyoto University, Japan)
Igor Vlasenko (Institute of Mathematics, NAS of Ukraine, Ukraine)
Nathalie Wahl (University of Copenhagen, Denmark)
Luoying Weng (University of Massachusetts, Amherst, USA)
Craig Westerland (University of Wisconsin, USA)
Susan Williams (University of South Alabama, USA)
Scott Wilson (University of Minnesota, USA)
Dezhen Xu (SUNY Stony Brook, USA)
Mahmoud Zeinalian (Long Island University, USA)
Ping Zhang (Eastern Mediterranean University, North Cyprus)

Plenary speakers

Ralph Cohen	Stefan Haller	Stephan Stolz
Mikio Furuta	Kaoru Ono	Dennis Sullivan
Søren Galatius	Vladimir Sharko	Peter Teichner

Organizers

Bogdan Bojarski	Mark Mahowald	Krzysztof Pawałowski
William Browder	Arkady Mal'tsev	Andrew Ranicki
Victor Buchstaber	Sergey Melikhov	Yuli Rudyak
Dan Burghelea	Haynes Miller	Nikolai Saveliev
Marek Golasiński	Aleksander Mishchenko	Evgeny Scepina
Stefan Jackowski	Sergey Novikov	Victor Vassiliev
Toshitake Kohno	Andrei Pajitnov	

Scientific program

The scientific program started on Monday, June 18, 2007 at 9:15 a.m.

Monday

Bogdan Bojarski, *Introduction*

Dennis Sullivan, *Applications of algebraic analogues of Postnikov systems to geometry*

Andre Henriques, *Higher Clifford algebras*

Petr Akhmetiev, *Geometric approach towards stable homotopy groups of spheres I, Adams Hopf invariants*

Nikolai Saveliev, *Rohlin's invariant and gauge theory*

Sergiy Maksymenko, *Fundamental groups of orbits of Morse functions on surfaces*

Kaoru Ono, *Floer cohomology and symplectic fixed points*

Vigleik Angeltveit, *Blowing up the simplicial indexing category*

Andreas Szűcs, *Classifying spaces in singularity theory*

Hiroshi Goda, *Circle-valued Morse maps, Reidemeister torsion, and sutured manifold theory*

Dariusz Miklaszewski, *The conjecture on the Brouwer fixed point theorem for $1-S^k$ -mappings*

Thomas Tradler, *String operations in an algebraic setting*

Maxim Kazarian, *Enumeration of complex nodal curves by the methods of cobordism theory*

Weimin Chen, *Differentiable transformation groups and homotopy $K3$ surfaces*

Alexey Chernavsky, *About local contractible neighborhoods in manifold homeomorphism group*

Tuesday

- Ralph Cohen, *Morse theory, Floer theory, and string topology*
 Natahalie Wahl, *Stabilizing mapping class groups of 3-manifolds*
 Alexander Fel'shtyn, *New directions in the Nielsen–Reidemeister theory*
 Cynthia Curtis, *Vanishing of $SL_2(\mathbb{C})$ Casson invariants*
 Malkhaz Bakuradze, *Transferred Chern classes and Morava K -theory rings*
 Craig Westerland, *String topology of classifying spaces and Hochschild cohomology*
 Uwe Kaiser, *Khovanov theory on oriented surfaces*
 Susan Williams, *Algebraic dynamics of knots and links*
 Andrei Teleman, *Instantons and curves on non-Kähler surfaces*
 Paolo Salvatore, *Cacti operads and the topological Deligne conjecture*
 Ulrich Koschorke, *Coincidence manifolds and homotopy theory*
 Daniel Silver, *Dynamics of twisted Alexander invariants*
 Scott Wilson, *Homotopy Frobenius algebras and forms of a manifold*

Wednesday

- Yuli Rudyak, *Postnikov: his life, work and legacy*
 Véronique Godin, *Higher genus of string topology*
 Volker Puppe, *Involutions on 3-manifolds and self-dual, binary codes*
 Kim Froyshov, *Floer homology and 4-manifolds with $b_1 = 1$ and $b^+ = 0$*
 Sergey Melikhov, *On link maps and embeddings in the 3/4 range*

Thursday

- Peter Teichner, *Super symmetric quantum field theories and generalized cohomology, I*
 Vladimir Smirnov, *Bott periodicity theorem and differentials of the Adams spectral sequence*
 Arkadiy Skopenkov, *Classification of smooth embeddings of 4-manifolds in the 7-sphere*
 Stefan Friedl, *Symplectic manifolds of the form $S^1 \times \mathbb{N}^3$*
 Norie Iwase, *Relative L - S category and categorical length*
 Stephan Stolz, *Super symmetric quantum field theories and generalized cohomology, II*
 Elke Markert, *A model for (connective) K -theory derived from field theories*
 Mikhail Skopenkov, *A formula for the group of links in the 2-metastable dimension*
 Boris Apanasov, *Reflection groups in 3-spheres and hyperbolic 4-cobordisms*
 Hellen Colman, *Lusternik–Schnirelmann theory for orbifolds as Lie groupoids*
 Andrés Ángel, *Cobordisms of orbifolds*
 Michael Sullivan, *String topology and contact homology*
 Hiroshi Ohta, *Symplectic fillings and normal singularities*
 Yuli Rudyak, *Manifolds of small Lusternik–Schnirelmann category*

Friday

- Vladimir Sharko, *Flows on manifolds and Bott functions*
 Tornike Kadeishvili, *A_∞ -algebra structure in cohomology and rational homotopy type*

Ping Zhang and Cornel Pinteá, *On smooth maps with critical points of a manifold onto a manifold; mappings with high-dimensional critical sets*

Masaaki Ue, *The Fukumoto–Furuta and the Ozsvath–Szabo invariants for spherical 3-manifolds*

Evgeny Sklyarenko, *Hopf’s absolute degree and cohomological degree theory for mappings of topological manifold*

Søren Galatius, *Spaces of graphs and manifolds*

John Terilla, *A smoothness theorem for differential BV algebras*

Bernhard Hanke, *Positive scalar curvature with symmetry*

Takayuki Morifuji, *On a secondary invariant of the hyperelliptic mapping class group*

Vladimir Nezhinskij, *A generalization of Goussarov’s groups for higher-dimensional knots*

Dmitry Millionshchikov, *Massey products in Lie algebra cohomology*

Dmitry Bolotov, *Macroscopic dimension of manifolds*

Nadya Shirokova, *On classification of Floer-type theories*

Mahmoud Zeinalian, *Closed string TCFT for Calabi–Yau elliptic spaces*

Saturday

Stefan Haller, *Complex valued Ray–Singer torsion*

Ralph Kaufmann, *Homotopy theory and moduli spaces*

Jan Jaworowski, *Degrees of maps between free G -manifolds*

Semen Podkorytov, *On homotopy invariants of maps to \mathbb{S}^1*

Elena Glushak, *Linear embeddings of simple graphs*

Jeffrey Giansiracusa, *The diffeomorphism group of a $K3$ surface and Einstein metrics*

Vassily Manturov, *Khovanov homology: topology and combinatorics*