

International School and Conference on
Foliations, Dynamical Systems, Singularity
Theory and Perverse Sheaves
6 - 21 October 2009, Samarkand, Uzbekistan
Website: <http://agenda.ictp.it/smr.php?2079>

Programme
First week courses

Tuesday, 6 October 2009:

Room 6

08:45 - 09:35 Registration - Coffee

Room 5

09:45 - 10:35	A. Soleev: Singularities of algebraic and differential equations
10:45 - 11:35	Remi Langevin: Codimension one foliations of space-forms of dimension 3
11:45 - 14:00	Lunch break
14:00 - 14:50	I. Ikromov: Estimations of oscillatory integrals.
15:00 - 15:50	F. El Zein: Solutions of linear of differential equations and Monodromy.
15:50 - 16:10	Coffee break
16:10 - 17:30	Working groups

Wednesday, 7 October 2009:

Room 5

08:45 - 09:35 Remi Langevin: Codimension one foliations of space-forms of

dimension 3

09:35 - 09:45 Coffee break
09:45 - 10:35 A. Soleev: Singularities of algebraic and differential equations
10:45 - 11:35 Marc Chaperon: Manifolds.
11:45 - 14:00 Lunch break
14:00 - 14:50 F. El Zein: Sheaves and Local systems.
15:00 - 15:50 I. Ikromov: Estimations of oscillatory integrals.
15:50 - 16:10 Coffee break
16:10 - 17:30 Working groups

Thursday, 8 October 2009:

Room 315

08:45 - 09:35 I. Ikromov: Estimations of oscillatory integrals.
09:35 - 09:45 Coffee break
09:45 - 10:35 Marc Chaperon: Manifolds
10:45 - 11:35 Remi Langevin: Codimension one foliations of space-forms of dimension 3
11:45 - 14:00 Lunch break
14:00 - 14:50 Sadullaev Azimboy: Holomorphic functions with thin singularity
15:00 - 15:50 F. El Zein: Local systems and Representation theory.
15:50 - 16:10 Coffee break
16:10 - 17:00 Sadullaev Azimboy: Holomorphic functions with thin singularity.

Friday, 9 October 2009:

Room 315

08:45 - 09:35 Marc Chaperon: Manifolds
09:35 - 09:45 Coffee break
09:45 - 10:35 F. El Zein: Local systems and Connections.
10:45 - 11:35 Remi Langevin: Codimension one foliations of space-forms of dimension 3
11:45 - 14:00 Lunch break
14:00 - 14:50 A. Dzhililov: Renormalizations and Invariant Measures of one-dimensional Maps with Singularities
15:00 - 15:50 A. A. Azamov: Limit Circles in Dynamical Systems
15:50 - 16:10 Coffee break
16:10 - 17:00 A. A. Azamov: Limit Circles in Dynamical Systems

Second week: Conference

Monday, 12 October 2009:
Room 315

- 08:45 - 09:35 Remi Langevin: Foliations.
09:35 - 09:45 Coffee break
09:45 - 10:35 Sadullaev Azimboy: On separately-subharmonic functions (the Lelong's problem).
10:45 - 11:35 M. Chaperon: Manifolds.
11:45 - 14:00 Lunch break
14:00 - 14:50 A.Sadullaev, S. Imomkulov : Seminar on complex analysis.
1. I.A. Ikromov: On a Fourier restriction problem.
2. Z. Ibragimov: Quasianalytic functions in sense of Denjoy, Bernnstine, Gonchar.
3. Z.R. Ashurova, N.Yu. Juraeva: Problem of regularization for polyharmonic functions of some class.
15:00 - 15:50 A.Sadullaev, S. Imomkulov : Continuation of seminar on complex analysis.
1. A.Khasanov: Integration of nonlinear Sine-Gordon equations
2. S. Imomkulov: Capacities on C^n .
3. A. Juraeva: On conjugation between circle maps with several break points.
15:50 - 16:10 Coffee break
16:10 - 17:00 Working groups

Tuesday, 13 October 2009:
Room 315

- 08:45 - 09:35 S. Gusein-Zade: Indices of vector fields and of 1-forms on varieties.
09:35 - 09:45 Coffee break
09:45 - 10:35 A.Narmanov: Applications of Foliation to the Theory of Control Systems
10:45 - 11:35 L. Birbrair: Metric theory of singularities.
11:45 - 14:00 Lunch break
14:00 - 14:50 Lê Dung Trang: Introduction to the theory of singularities and Algebraic geometry.
15:00 - 15:50 : Rahim Zaare-Nahandi: Algebraic Features of Canonical Generic Singularities
15:50 - 16:10 Coffee break
16:10 - 17:00 Working groups

**Wednesday, 14 October 2009:
Room 315**

08:45 - 09:35 S. Gusein-Zade: Indices of vector fields and of 1-forms on varieties
09:35 - 09:45 Coffee break
09:45 - 10:35 Lê Dung Trang: Introduction to the theory of singularities and Algebraic geometry.
10:45 - 11:35 A. Teplinsky: Circle maps, their conjugacies and renormalizations
11:45 - 14:00 Lunch break
14:00 – 15:30 Reception of the Rector of SSU prof. T. Shirinov.

Seminar on Dynamical Systems and Foliations
prof. A. Soleev and prof. I. Ikromov
Room 314

15:30 -15:55 G. Kolutsky: On the Hilbert-Smale problem.
15:55- 16:20 A. Kh. Begmatov, Z. H. Ochilov: Integral geometry problems and D'Alembert maps.
16:20 - 16:45 B. B. Babajanov, A. I. Babayarov, N. N. Indiaminov: Dynamics of the three layered beam under influence of pulse loading applied on arbitrary section of span.
16:45 – 17:10 J. Abdullaev: Asymptotics eigenvalues of two-particle Schrodinger operators on a lattice.
17:10 - D. D. Turakulov: On uniform estimates for oscillatory integrals with convex phases.

Seminar on Singularity Theory and Perverse Sheavers
Prof. Lê Dung Trang
Room 315

15:30 -15:55 Martin Bernd: Modular strata of unimodular singularities.
15:55- 16:20 G. G. Gusev: Monodromy zeta-functions.
16:20 - 16:45 A. Yu. Buryak: Existence of projective varieties with an arbitrary set of characteristic numbers.
16:45 – 17:10 R. M. Ibadov: On A New Research Direction In The Finsler Spaces And Their Applications.
17:10 – “The anisotropic world” (A movie, an addendum to the talk of R. M. Ibadov)

**Thursday, 15 October 2009:
Room 315**

08:45 - 09:35 S. Gusein-Zade: Indices of vector fields and of 1-forms on varieties.
09:35 - 09:45 Coffee break .
09:45 - 10:35 Lê Dung Trang: Introduction to the theory of singularities and Algebraic geometry.
10:45 - 11:35 S. M. Natanzon: Topological String Theory.

11:45 - 14:00 Lunch break.

**Seminar on Dynamical Systems
Room 314**

14:00 - 14:30 A.Teplinsky: Circle maps, their conjugacies and renormalizations
14:30 - 15:00 U. Safarov: Critical circle maps with a break points.
15:00 - 15:30 A.Djalilov, A.Begmatov: Circle homeomorphisms with break points.
15:30 - 16:00 Kh. Akhadkulov: Strong version of Denjoy inequality for circle diffeomorphisms.

**Seminar on Differential equations
Room 315**

14:00 - 14:30 R. Al-Momani: On the comparability of linear partial differential operators.
14:30 - 15:00 M.I. Muminov: On asymptotics for the number of eigenvalues lying in the Gap of the essential spectrum of Schrodinger operator on lattice.
15:00 - 15:30 S. Nariman: Analytic cycles on complex manifolds.
15:30 - 16:00 A.Haydarov, M. Rustamov: About uniqueness of the solution of one dynamic return problem.
16:00 - 16:30 D. Shodiyev, F. Tursunov: About uniqueness and existence of solutions of a differential equation of second order.

**Friday, 16 October 2009:
Room 315**

09:30 - 10:20 S. Gusein-Zade: Indices of vector fields and of 1-forms on varieties
10:20 - 10:30 Coffee break
10:30 - 11:20 Lê Dung Trang: Introduction to the theory of singularities and Algebraic geometry.
11:30 - 12:20 A. Khatamov: On the best approximations of functions. Chebishev's theorems and its applications.
12:20 - 14:30 Lunch break

**Seminar on Algebraic geometry.
Room 315**

14:30 - 15:00 E. Gorsky: Motivic integration and knot invariants.
15:00 - 15:30 Akram Javed: Introduction to the Fractional Calculus and Fractional Operator

Seminar on Differential equations.

Room 314

14:30 - 15:00 G. Shyshkanova: Solution of integral equations with weak singularity in contact integration problems.

15:00 - 15:30 M.U. Yakshiboev, A.G. Gaziev, U.Kh.Narzullaev: On One modification of the Riemann-Liouville Fractional Integrodifferentiation in the Lebesgue Space with Variable Exponent.

15:40 - Working groups

Monday, 19 October 2009:

Room 315

08:45 - 09:35 A. Davydov: Foliations defined by implicit differential equations.

09:35 - 09:45 Coffee break

09:45 - 10:35 Meral Tosun: Lie algebras and Singularities.

10:45 - 11:35 A. Khatamov: On the Exact Estimates of the Best Spline Approximations of Functions.

11:45 - 14:00 Lunch break

Seminar on Dynamical Systems and Probability

Room 315

14:00 - 14:30 T.Rasulov: On the spectrum of model operator in Fock space.

14:30 - 15:00 Ya. M. Khusainov, R.J. Usmanov: The limiting theorem for priority systems in the conditions of the big loading.

15:00 - 15:30 I.B.Khalikulov, S.I.Khalikulov: On convergence rates in the law of large numbers.

15:30 - 16:00 S.F.Fayzullaeva: About characteristic spectral estimation random processes.

Seminar on Dynamic Control Systems and mechanics

Room 314

14:00 - 14:30 I.I.Jumanov, A.R.Axatov. Estimation of reliability for the system of mistakes dynamic control at transfer and processing of the text information.

14:30 - 15:00 O.I.Djumanov. Construction of transparent structure for neural networks training with the minimal learning sampling of dynamic processes data.

15:00 - 15:30 Kh.Z.Igamberdiev, Yu.M.Abdurakhmanova, O. O. Zaripov Regular algorithms of identification and estimation of dynamic systems.

15:30 - 16:00 Sh.M. Burkutboyev: Wave propagation equations of rotating cylindrical solid and their solutions.

Tuesday, 20 October 2009

Room 315

08:45 - 09:35 A. Davydov: Foliations defined by implicit differential equations.

09:35 - 09:45 Coffee break

09:45 - 10:35 M.Uludag: The universal arithmetic curve

10:45 - 11:35 L. Birbrair: Real algebraic geometry.

11:45 - 14:00 Lunch break

Seminar on Function theory and differential equations

Tuesday, 20 October 2009

Chairman: A. Davydov

Room 314

14:00 - 14:30 A. Khatamov: On the best Polynomial Approximations of functions in many Real variables from the Sobolev Spaces with Derivations of bounded variation.

14:30 - 15:00 I.E. Niyozov, O.E. Makhmudov: The problem Cauchy for the system of equations for theory of moment elasticity in \mathbb{R}^n ;

15:00 - 15:30 E.N. Sattarov, K.O. Makhmudov: The Cauchy problem for the system of Maxwell equation.

15:30 - 16:00 E.N. Sattarov: On the continuation of solution of the generalized Cauchy-Riemann system.

Seminar on mathematical physics and geometry

Chairman: A. Soleev

Room 315

14:00 - 14:30 Z.I. Muminov: Bound states of two-particle lattice Hamiltonian.

14:30 - 15:00 H. Nosirova: Basic concepts and methods of estimations n -widths.

15:00 - 15:30 H. Kh. Ruzimuradov: On Lattice point problem in polygons and Uniform Distributions mod 1.