## Programme Schedule

## Wednesday, December 26, 2012

| Time | Details | Venue |
| :---: | :---: | :---: |
| 09:00 to 10:30 | REGISTRATION AND INAUGURAL FUNCTION | Prof. C. C. Mehta Auditorium |
| 10:30 to 11:00 | High Tea | Lounge at Prof. C. C. Mehta Auditorium |
| Chairperson: S. G. Dani |  |  |
| 11:00 to 11:50 | Lecture-01 <br> Benjamin Weiss <br> The Isomorphism Problem in Ergodic Theory - Recent Developments | Prof. C. C. Mehta Auditorium |
| 11:55 to 12:45 | Lecture-02 <br> Amos Nevo <br> Diophantine approximation, arithmetic groups and ergodic theory |  |
| Lunch: 12:45 to 14:15 |  |  |
| Chairperson: Alexander Gorodnik |  |  |
| 14:15 to 15:05 | Lecture-03 <br> Jaydev Artherya <br> Gap Distributions for the Golden L | Room No. 11 <br> Mathematics <br> Department |
| 15:10 to 16:00 | Lecture-04 <br> Vasili Bernik <br> New connections between Dynamic Systems, Metric theory of Diophantine approximation and distribution of algebraic numbers |  |
| Tea / Coffee Break 16:00 to 16:15 |  |  |
| Chairperson: Ravi A. Rao |  |  |
| 16:15 to 16:55 | Lecture-05 <br> Naoya Sumi <br> Diffeomorphisms preserving hyperbolic SRB measures | Room No. 11 Mathematics Department |
| 17:00 to 17:40 | Lecture-06 <br> Kari Eloranta <br> Sequences with long range exclusions |  |
| 17.45 to 18.25 | Lecture-07 <br> Mythily Ramaswamy <br> Control of Differential Equations |  |
| 19.30 to 21.00 | Dinner | Hotel Nidra |

## Thursday, December 27, 2012

| Time | Details | Venue |
| :---: | :---: | :---: |
| Chairperson: M. S. Raghunathan |  |  |
| 09:00 to 09:50 | Lecture-08 <br> Alexander Gorodnik <br> $Z^{k}$-actions on nilmanifolds and Diophantine approximation | Room No. 11 Mathematics Department |
| 09:55 to 10:45 | Lecture-09 <br> Arnaldo Nogueria <br> Classical homogeneous multidimensional continued fraction algorithms are ergodic |  |
| Tea / Coffee Break 10:45 to 11:00 |  |  |
| Chairperson: Nimish Shah |  |  |
| 11:00 to 11:50 | Lecture-10 <br> Jon Aaronson <br> Rational weak mixing in infinite measure spaces | Room No. 11 <br> Mathematics <br> Department |
| 11:55 to 12:45 | Lecture-11 <br> Barak Weiss <br> Examples for the horocycle ow on moduli spaces |  |
| Lunch : 12:45 to 14:00 |  |  |
| Chairperson: K.K. Azad |  |  |
| 14:00 to 14:50 | Lecture-12 <br> V. Kannan <br> Coexistence of cycle lengths for linear operators | Prof. C. C. Mehta Auditorium |
| 14:55 to 15:45 | Lecture-13 <br> Anish Ghosh <br> Bounded orbits of flows on homogeneous spaces |  |
| Tea / Coffee Break 15:45 to 16:00 |  |  |
| Chairperson: Benjamin Weiss |  |  |
| 16:00 to 17:25 | Lecture -14: Talk about Prof. Dani's work-1 Francois Ledrappier | Prof. C. C. Mehta Auditorium |
|  | Lecture-15: Talk about Prof. Dani's work-2 Elon Lindenstrauss |  |
| 17.30 to 18.20 | Thoughts from students of Prof. Dani and also from others |  |
| 18.20 to 18.50 | Honors to be done by Prof. Yogesh Singh, Honorable Vice-Chancellor |  |
| 19.00 to 20.00 | Cultural program Artists from Faculty of Performing Arts |  |
| 20.00 to 22.00 | Dinner | Hotel Nidra |

## Friday, December 28, 2012

| Time | Details | Venue |
| :---: | :---: | :---: |
| Chairperson: Tom Ward |  |  |
| 09:00 to 09:50 | Lecture-16 <br> Elon Lindenstrauss <br> An effective proof of the Oppenheim Conjecture | Room No. 11 Mathematics Department |
| 09:55 to 10:45 | Lecture-17 <br> Francois Ledrappier <br> Entropies and rigidities of compact manifolds |  |
| Tea / Coffee Break 11:05 to 11:30 |  |  |
| Chairperson: Vasili Bernik |  |  |
| 11:00 to 11:50 | Lecture-18 <br> Kazuhiro Sakai <br> Measure expansive diffeomorphisms | Room No. 11 |
| 11:55 to 12:45 | Lecture-19 <br> S. G. Dani <br> Lattice subgroup actions and diophantine approximation with binary quadratic forms | Mathematics Department |
| Lunch : 12:45 to 14:00 |  |  |
| Chairperson: Amos Nevo |  |  |
| 14:00 to 14:40 | Lecture-20 <br> Riddhi Shah <br> Embeddability of infinitely divisible probability measures on Lie groups |  |
| 14:45 to 15:25 | Lecture-21 <br> Ravindra Kulkarni <br> Inductive Construction of Representations of Finite Solvable Groups | Room No. 11 <br> Mathematics Department |
| 15.30 to 16.10 | Lecture-22 <br> T. N. Venkataramana <br> Monodromy and Arithmetic Groups |  |
| Tea / Coffee Break 16:10 to 16:30 |  |  |
| Parallel Session (Short Presentations) |  |  |
| Session 1; Chairperson- SD Adhikari |  |  |
| 17.00 to 17.20 | Presentation -1 K. Vinod Mangang | Prof. UN Singh |
| 17.20 to 17.40 | Presentation -2 Haribhai Kataria; | Seminar Hall Mathematics |
| 17.40 to 18.00 | Presentation-3 Siyu Reiu | Department |
| 18.00 to 18.20 | $\begin{aligned} & \text { Presentation - } 4 \\ & \text { Sofia Treio } \end{aligned}$ |  |
| 18.20 to 18.40 | Presentation-5 VVMSarma Chandramouli |  |
| Session 2; Chairperson- CS Aravinda |  |  |
| 17.00 to 17.20 | $\begin{aligned} & \text { Presentation }-6 \\ & \text { Ruchi Das } \end{aligned}$ |  |
| 17.20 to 17.40 | Presentation -7 <br> Sejal Shah |  |
| 17.40 to 18.00 | Presentation -8 <br> Ekta Shah | Room No. 11 Mathematics |
| 18.00 to 18.20 | Presentation -9 Oliver Sergent |  |
| 18.20 to 18.40 | Presentation -10 Dhaval Thakkar |  |
| 19.30 to 21.00 | Dinner | Hotel Nidra |

## Saturday, December 29, 2012

| Time | Details | Venue |
| :---: | :---: | :---: |
| Chairperson: Elon Lindenstrauss |  |  |
| 09.00 to 09.50 | Lecture-23 <br> Nimish Shah <br> Equidistribution and counting on orbits of geometrically infinite hyperbolic groups | Room No. 11 Mathematics Department |
| 09.50 to 10.45 | Lecture-24 <br> Tom Ward <br> Group automorphisms from a dynamical point of view |  |
| Tea / Coffee Break 10:45 to 11:00 |  |  |
| Chairperson: Riddhi Shah |  |  |
| 11:00 to 11.40 | Lecture-25 <br> Mahesh Nerurkar | Room No. 11 Mathematics Department |
| 11:45 to 12:25 | Lecture-26 <br> Pralay Chatterjee |  |
| 12.30 to 13.10 | Lecture-27 <br> Vadim Kaimanovich <br> Random graphs, stochastic homogenization and equivalence relations |  |
| Lunch : 13:10 to 14:30 |  |  |
| Chairperson: Kazuhiro Sakai |  |  |
| 14:30 to 15:00 | Lecture-28 <br> Tarun Das <br> $C^{1}$-generically continuum-wise expansive homoclinic classes are hyperbolic | Room No. 11 Mathematics Department |
| 15:00 to 16:00 | OPEN PROBLEMS SESSION <br> Host: Jon Aaronson and Alexander Gorodnik |  |
| 16.00 to 16.30 | VALEDICTORY FUNCTION Host: Riddhi Shah |  |
| Tea / Coffee 16:30 |  |  |

