BELUR MAIN CAMPUS — SCHOOL OF MATHEMATICAL SCIENCES

DEPARTMENT OF MATHEMATICS

No. of students admitted in various courses during the last 3 years:

No. of students admitted in M.Sc. Mathematics in last three years:

2015-16: 5, 2014-15: 7, 2013-14: 9

Research and Extension facility and actual work done during the last 3 years:

All faculty have personal desktop computers and online access to research journals with the help of which they carry on their research activities.

Weekly colloquia organized with talks on current research topics by speakers from various universities and research institutes. Weekly seminars organized on current research topics in geometry and topology in which the faculty take part and discuss research trends and papers.

Publications of faculty during the last 3 years:

Dr Somnath Basu

(1) Introductory Lectures on Surgery Theory, S. Basu, T. Farrell, Introduction to Modern Mathematics, Advanced Lectures in Mathematics, Vol. 33 (2015)
(2) Homotopy groups and periodic geodesics of closed 4-manifolds, S.Base, S. Basu, International Journal of Mathematics, Vol. 26, No. 7 (2015)
(3) Realizing congruence subgroups inside the diffemorphism group of a product of spheres, S. Basu, T.Farrell, accepted for publication in *Topology and its Applications*
(4) Of Sullivan models, Massey products and twisted Pontrjagin products, S. Basu, Journal of Homotopy Theory and Related Structures, Vol. 13, No. 1 (2015)
(5) Transverse string topology and the cord algebra, S. Basu, J. McGibbon, D. Sullivan, M. Sullivan, Journal of Symplectic Geometry, Vol. 10, No. 2 (2015)
(6) Enumeration of curves with two singular points, S. Basu, R. Mukherjee, Bulletin des Sciences Mathematiques, Vol. 139, No. 6 (2015)

Dr Kingshook Biswas

(1) Quasi-conformal deformations of nonlinearizable germs, K. Biswas
    Proceedings of the American Mathematical Society, Vol. 142, Number 6, June 2014, pp. 2013–2017.

(2) Positive area and inaccessible fixed points for hedgehogs, K. Biswas
Ergodic Theory and Dynamical Systems, FirstView Article, pp 1-12.
Cambridge University Press, 2015. DOI: http://dx.doi.org/10.1017/etds.2014.143
Published online by Cambridge University Press: 13 April 2015

(3) Log-Riemann surfaces, Caratheodory convergence and Euler's formula, K. Biswas, R. Perez-Marco
Contemporary Mathematics, Volume 639, 2015, pg 197-203,
DOI: http://dx.doi.org/10.1090/conm/639

(4) Uniformization of simply connected finite type log-Riemann surfaces, K. Biswas, R. Perez-Marco
Contemporary Mathematics, Volume 639, 2015, pp.205-216,
DOI: http://dx.doi.org/10.1090/conm/639

(5) On Moebius and conformal maps between boundaries of CAT(-1) spaces, K. Biswas.
Annales de l'Institut Fourier, Tome 65, no 3 (2015), pp.1387-1422

Dr Samik Basu

(1) A. Basu, S. Basu, Mahan Mj, Nash Equilibria via Duality and Homological Selection,
Proc. Indian Acad. Sci. (Math. Sci.) 124 (2014), 581--602

(2) S. Basu, D. Sen, Representing Bredon cohomology with local coefficients, J. Pure Appl. Algebra 219 (2015), 3992--4015

(3) S. Basu, S. Basu, Homotopy groups and periodic geodesics of closed 4-manifolds,
International Journal of Mathematics, 26 (2015), no. 8

(4) S. Basu, G. Mukherjee, S. Sarkar, Some computations in equivariant cobordism in relation to Milnor manifolds, Topology Appl. 172 (2014), 1--9

Dr Utsav Choudhury:

(1) Motivic Decomposition for for relative Geometrically cellular stacks (with J. Skowera),
Communication in algebra, Volume 44, Issue 2, 2016

(2) Connectivity of motivic H-spaces. , Algebr. Geom. Topol. 14 (2014), no. 1, 37-55

National and international linkages:

The following professors are adjunct faculty in the Mathematics department:

Prof. Indranil Biswas (TIFR Mumbai),

Prof. Sukumar Das Adhikari (HRI Allahabad),

Prof. Ram Murty (Queen's University, Canada),

Prof. Kumar Murty (University of Toronto, Canada).

Conferences and Workshops organized/attended by the faculty during the last 3 years:

Prof. Mahan Maharaj(*)

(1) Israel -- Conference on Geometric group Theory -- May 2014
(2) South Korea—International Congress of Mathematicians -- August 2014
(3) U. Minnessotta (Yamabe Symposium Invited talk) USA--Oct 2014
   (*) *He has moved to TIFR (Mumbai) in November 2015*

Dr Kingshook Biswas:

Nanjing, China – Conference on holomorphic dynamics – June 2014

Invited lectures: TIFR CAM, Bangalore, March 2015

Dr Somnath Basu:

Visited University of Nantes (September 1-7, 2014) for a mathematical conference

Visited HRI, Allahabad (December 1-14) for a workshop on Symplectic Geometry and Contact Topology

Visited TIFR, Mumbai (December 14-21) for a conference on Symplectic Geometry and Contact Topology

Dr Samik Basu:

Invited lectures, workshops : HRI – December 2014, TIFR – December 2014

Dr Atreyee Bhattacharya:

Lectured in ATM workshop on `Differential Geometry and Ricci Flow'-- Aug 5-10 in University of Pune

Lectured in `Instructional school for lecturers in Differential Geometry' during – December 8-20 in Banasthali University, Rajasthan