

**Tata Institute of Fundamental Research  
School of Mathematics**

**Past Lecture Courses in the School of Mathematics (2015-16 onwards<sup>1</sup>)**

<b>Year</b>	<b>Semester</b>	<b>Course(s)</b>	<b>Instructor(s)</b>
2015	Fall	<b>First year courses</b> Algebra I Analysis I Topology I  <b>Second year/Advanced courses</b> Number Theory Commutative Algebra Representation theory of Lie groups Algebraic Geometry Discrete Mathematics	Nitin Nitsure Anish Ghosh S.K. Roushon  E. Ghate Ravi Rao D. Prasad Yogish Holla Amitava Bhattacharya
2016	Spring	<b>First year courses</b> Algebra II Analysis II Topology II  <b>Second year/Advanced courses</b> Expander Graphs	Ravi Rao J. Sengupta S.K. Roushon  Anish Ghosh, Prahlad Harsha
2016	Fall	<b>First year courses</b> Algebra I Analysis I Topology I  <b>Second year/Advanced courses</b> Introduction to Algebraic Stacks Introduction to Verdier duality and perverse sheaves Manifold Topology	R. Ganapathy T.N. Venkataramana C.S. Rajan  Nitin Nitsure V. Srinivas  S.K. Roushon
2017	Spring	<b>First year courses</b> Algebra II Analysis II Topology II	Sandeep Varma Yogish Holla Mahan Mj
2017	Fall	<b>First year courses</b> Algebra I Analysis I Topology I  <b>Second year/Advanced courses</b> Introduction to Algebraic Stacks	E. Ghate S. Bhattacharya S. Subramanian  Nitin Nitsure
2018	Spring	<b>First year course</b> Algebra II Analysis II	Raja Sridharan A. Sankaranarayanan

<sup>1</sup> The list may not be exhaustive.

Year	Semester	Course(s)	Instructor(s)
		Topology II	Arvind Nair
		<b>Second year/Advanced courses</b> Introduction to Algebraic Stacks Geometry for Physics	Nitin Nitsure Nitin Nitsure
2018	Fall	<b>First year courses</b> Algebra I Analysis I Topology I	Tanmay Deshpande S. Bhattacharya V. Srinivas
2019	Spring	<b>First year course</b> Algebra II Analysis II Topology II	Amalendu Krishna T.N. Venkataramana V. Srinivas
		<b>Second year/Advanced courses</b> Deformation theory Matlis Duality Perverse sheaves Ergodic geometry Introduction to Rigid Analysis	Nitin Nitsure Dilip Patil Swarnava Mukhopadhyay Anish Ghosh E. Ghate
2019	Fall	<b>First year courses</b> Algebra I Analysis I Topology I	A.J. Parameswaran Sandeep Varma S.K. Roushon
		<b>Second year/Advanced courses</b> Ergodic Geometry Algebraic Geometry	Anish Ghosh Yogish Holla
2020	Spring	<b>First year course</b> Algebra II Analysis II Topology II	C.S. Rajan Mahan Mj S.K. Roushon
		<b>Second year/Advanced courses</b> Class field theory Algebraic Geometry	Amalendu Krishna Yogish Holla
2020	Fall	<b>First year courses</b> Algebra I Analysis I Topology I	Tanmay Deshpande Amitava Bhattacharya Anand Sawant
		<b>Second year/Advanced courses</b> Representation theory of Lie algebras Singularities of the minimal model program Dynamical systems Hyperbolic geometry	Swarnava Mukhopadhyay Omprokash Das Anish Ghosh, S. Mukherjee Mahan Mj
2021	Spring	<b>First year course</b> Algebra II Analysis II Topology II	Vijaylaxmi Trivedi Siddhartha Bhattacharya Anand Sawant

<b>Year</b>	<b>Semester</b>	<b>Course(s)</b>	<b>Instructor(s)</b>
		<b>Second year/Advanced courses</b> Advanced Topics course in Representation theory Fundamental theorems of MMP	Swarnava Mukhopadhyay  Omprokash Das
2021	Fall	<b>First year course</b> Algebra I Analysis I Topology I  <b>Second year/Advanced courses</b> Spectral Geometry and Semi-classical analysis  Algebraic Geometry	Arvind Nair T.N. Venkataramana A. J. Parameswaran  Sugata Mondal and Mayukh Mukherjee (IIT-B) Yogish Holla