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TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS-NCBS Dynamic Friday

- Title : Correlations in multispecies exclusion processes
- Speaker : Arvind Ayyer, IISc, Bangalore
- Date : Friday, November 1, 2019
- Time : 2:15 PM
- Venue : NCBS (ground floor of Simons Centre)
- Abstract : Exclusion processes are nontrivial exactly solvable models of transport which have potential applications in nonequilibrium processes like traffic flow and molecular motors. We consider a multispecies Totally Asymmetric Simple Exclusion Process (TASEP) on a finite ring. We show that nearest neighbour correlations have a simple structure. Although we have proofs, we are far from a complete understanding of this simplicity. Time permitting, I will mention some generalisations. This is joint work with Svante Linusson.