Indian Institute of Space Science and Technology

Valiamala, Thiruvananthapuram - 695 547, Kerala

Department of Mathematics

National Mathematics Day

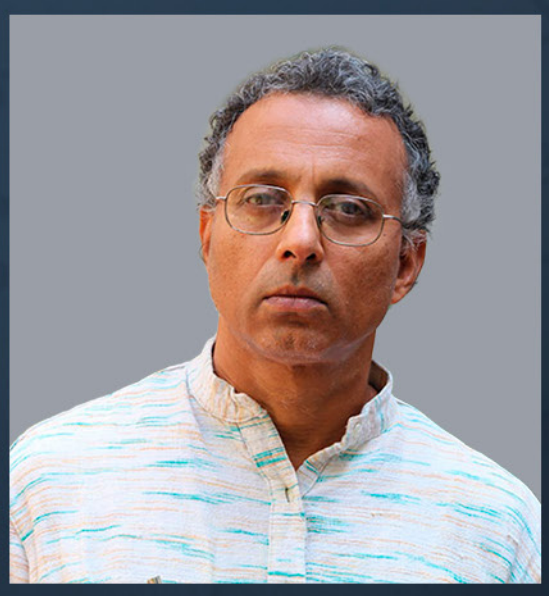
(Birth anniversary of Srinivasa Ramanujan)

Talk on

MATROIDS AND MASON'S CONJECTURE

11:00 AM | **22** DECEMBER **2025** | L102 A, Interdisciplinary Building (D1)

Abstract: This will be an expository talk accessible to undergraduate students. The only prerequisites are some familiarity with calculus and basic linear (or matrix) algebra. We will begin by introducing the notion of matroids. The basic examples of matroids come from two sources: matrices and graphs. In the last two decades, there has been an explosion of research activity on the theory of matroids. We will look at one example of this: namely the proof of Mason's conjecture, which was open for about five decades.



Prof. K N Raghavan

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Professor K N Raghavan obtained his PhD in Mathematics from Purdue University in 1991. After a two-year stint at Michigan State University as a Postdoc, he joined the Chennai Mathematical Institute as Faculty in 1993. He moved to the Institute of Mathematical Sciences (IMSc) in 2001, from where he retired voluntarily in 2024 as a Senior Professor. He specialises in the representation theory of groups and algebras and is the co-author, with Professor V Lakshmibai, of a monograph on Standard Monomial Theory: an Invariant Theoretic Approach.