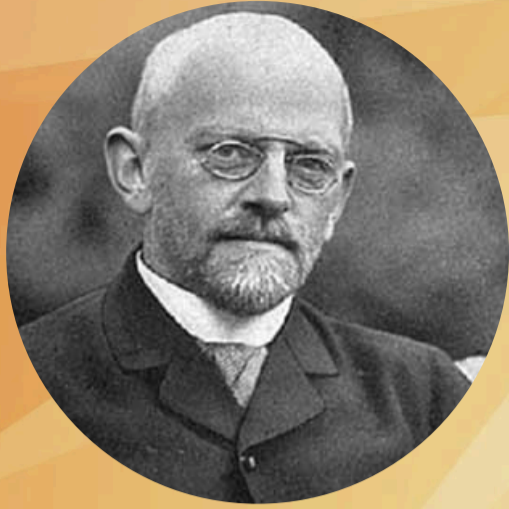


KERALA SCHOOL OF MATHEMATICS



David Hilbert Colloquium

Seminar Hall
5:00 PM
January 3, 2024

HILBERT'S FINITENESS THEOREM FOR INVARIANTS

Prof. Vasudevan Srinivas
University at Buffalo

Abstract : This talk will give an introduction to Hilbert's work on invariant theory, which includes the novel use of the Hilbert basis theorem and the Hilbert syzygy theorem. This work led to the development of modern invariant theory, and initiated the field of commutative algebra. An accessible source is a translated version of his lecture notes: *Theory of Algebraic Invariants*, David Hilbert, translated by Reinhard C. Laubenbacher, Cambridge Mathematical Library, Cambridge University Press (1993).



Prof. Vasudevan Srinivas received his BSc degree from Bangalore University and did his MS (1978) and PhD (1982) degrees at the University of Chicago. He began his academic career at the Tata Institute of Fundamental Research, Mumbai in 1983. He was a Distinguished Professor in the School of Mathematics, Tata Institute of Fundamental Research, Mumbai, and the Former Chairman of the National Board for Higher Mathematics, India. Prof. Srinivas is an elected Fellow of the Third World Academy of Sciences, American Mathematical Society, Indian National Science Academy, and the Indian Academy of Sciences and was awarded the Shanti Swarup Bhatnagar Prize for Science and Technology in 2003. Prof. Srinivas works in the field of algebraic geometry; his particular subfields of interest include the areas of algebraic cycles, K-theory, commutative algebra and positive characteristic methods.