MATH-IMS Joint Colloquium Series
The Chinese University of Hong Kong

This MATH-IMS Joint Colloquium Series in pure mathematics is organized by the Department of Mathematics and the Institute of Mathematical Sciences (IMS) at the Chinese University of Hong Kong. The series focus on all areas of pure mathematics together with theoretical developments and applications.

Date: April 29, 2021 (Thursday)
Time: 4pm – 5pm (Hong Kong Time)
Zoom Link: https://cuhk.zoom.us/j/98846779826

Representation Theory of Lie superalgebras in the BGG category
Speaker: Professor Shun-Jen Cheng
Academia Sinica

Abstract: Substantial progress on the solution of the irreducible character problem for the complex simple Lie superalgebras in the so-called BGG category has been made over the last decade or so. In this talk we shall first give a brief description of these simple Lie superalgebras and then to give an outline of some of these results on their irreducible characters.

Bio: Professor Cheng received his Ph.D. from the Department of Mathematics at Harvard University in 1993 under the supervision of Prof. Victor Kac. He has taken up professorship and visiting positions at various prestigious institutions, including National Cheng-Kung University, National Taiwan University, Max-Planck Institute and MIT. Prof. Cheng was a research fellow at Academia Sinica, where he has been the director for the Institute of Mathematics since 2013 until 2020. Prof. Cheng's research interests lie in the representation theory of Lie algebras and Lie superalgebras. Due to his important work in these areas, Prof. Cheng was awarded the Khwarizmi International Award in 2010, the World Academy of Sciences TWAS Prize in Mathematics in 2011 and the Academic Award of the Ministry of Education in 2011.