



XIAMEN UNIVERSITY MALAYSIA

廈門大學 馬來西亞分校

Research Talk

REPRESENTATIONS OF THE ELLIPTIC LIE ALGEBRAS AND VERTEX ALGEBRAS

May 6, 2024 (Monday), 3:30–4:30 pm Room A4#G06



Shaobin Tan

Dean of the School of Mathematical Sciences
Xiamen University (XMU)

tans@xmu.edu.cn

Research interests: Representation Theory,
Associative Algebra, Algebra, Lie Algebra, Group
Theory, Vertex Operator Algebra.

SPEAKER INTRODUCTION

Prof. Shaobin Tan is the Dean of the school of mathematical sciences in XMU, China (XMU).

ABSTRACT

The extended affine Lie algebras (EALAs) are generalizations of the finite dimensional simple Lie algebras and affine Kac-Moody algebras over the field of complex numbers. The elliptic Lie algebras (i.e. the toroidal EALAs of nullity two) are a class of the most important EALAs. In this talk, we deal with the classification of irreducible integrable representations for the elliptic Lie algebras, and the module categories correspondence between the elliptic Lie algebras and the associated vertex algebras.