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Representation and Number Theory Seminar

Frobenii on Morava *E*-theoretical Quantum Groups

by

Professor Yaping YANG
University of Melbourne

Abstract:

In this talk, I will explain a connection between stable homotopy theory and representation theory. I will focus on one application of this idea to a problem arising from the modular representation theory. More explicitly, we study a family of new quantum groups labelled by a prime number and a positive integer constructed using the Morava *E*-theories. Those quantum groups are related to Lusztig's 2015 reformulation of his conjecture from 1979 on character formulas for algebraic groups over a field of positive characteristic. This talk is based on my joint work with Gufang Zhao.

Date : October 19, 2021 (Tuesday)
Time : 9:00am – 10:00am (Hong Kong SAR)
Zoom link :
<https://cuhk.zoom.us/j/97838822137?pwd=ZTVvSC9abmNjR3RCcS9FTzJNTVhXdz09>
Meeting ID : 978 3882 2137
Passcode : sesame

All are Welcome