



The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on Pure Mathematics

Presentation of Yangian algebras in BCD types

By

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Abstract

It is well-known that the R-matrix presentation of the Yangian in type A yields generators of its Drinfeld presentation. It has been an open problem since Drinfeld's pioneering work to extend this result to the remaining types. We will provide a solution for the classical types of BCD by constructing an explicit isomorphism between the R-matrix and Drinfeld presentations of the Yangian. It is based on an embedding theorem which allows us to consider the Yangian of rank $n-1$ as a subalgebra of the Yangian of rank n of the same type. This is joint work with M. Liu and A. Molev.

Date: Tuesday, 21 August 2018

Time: 3:00p.m. - 4:00p.m.

**Venue: Room 5501, Academic Building
(Lifts 25, 26), HKUST**

All are welcome!