



Applied Mathematics Seminar

“ q -Operators, QQ-systems and Bethe Ansatz”

BY

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Abstract: We introduce the notions of (G, q) -opers and establish a one-to-one correspondence between them and the set of nondegenerate solutions of a system of Bethe Ansatz equations (which are in turn dual to the so-called QQ-system). Additionally we associate to a (G, q) -oper a class of meromorphic sections of a G -bundle, satisfying certain difference equations, which we refer to as generalized q -Wronskians. We show that the QQ-systems and their extensions emerge as the relations between generalized minors, thereby putting the Bethe Ansatz equations in the framework of cluster mutations known in the theory of double Bruhat cells.

Date: February 7, 2022

Time: 18:30

Place: Zoom

Zoom address will be announced Monday afternoon.