

Bethe Colloquium

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Quantum cohomology of Grassmannians via R-matrices and integrable systems

In this talk I want to give an elementary description of the quantum cohomology rings of Grassmannians. The main idea is to connect it with a concrete model of particle configurations on a circle. The model allows to describe the case of an arbitrary Grassmannian from the case of a point using certain creation operators. As a consequence we obtain a proof of an isomorphism theorem going back to Witten between these rings and certain WZNW-fusion rings. Connections to R-matrices and equivariant quantum cohomology might be mentioned.

Lecture Hall 1

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