

**Friday, October 13th** (at 4.00pm, UK time)

**Nikita Belousov (Steklov Mathematical Institute)**

*Title: Baxter Q-operators in Ruijsenaars hyperbolic system.*

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**ABSTRACT**

The eigenfunctions of the Ruijsenaars hyperbolic system were constructed by M. Hallnäs and S. Ruijsenaars in 2012.

Recently in the joint work with S. Derkachov, S. Kharchev and S. Khoroshkin we proved some properties of these eigenfunctions using the so-called Baxter Q-operators.

In the talk I will explain the motivation behind these operators, their key properties and how they are used to prove the bispectral symmetry, orthogonality and completeness of the eigenfunctions.

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