SIDE 14.2

Contribution ID : 70

Tetrahedron maps and symmetries of 3D integrable discrete equations.

Monday 19 Jun 2023 at 11:30 (00h30')

Content :

I will discuss a connection between the tetrahedron equation for maps and the consistency property of integrable discrete equations on $\mathbb{Z}^3$. The connection is based on the invariants of symmetry groups of the lattice equations, generalizing a method developed in the context of Yang-Baxter maps. The method will be demonstrated to certain octahedron type lattice equations, leading to some new examples of tetrahedron maps and integrable coupled lattice equations.

The talk is based on a joint work with Pavlos Kassotakis, Maciej Nieszporski and Vassilis Papageorgiou.

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Session classification : Yang-Baxter and tetrahedron equations

Track classification : --not yet classified--

Type : --not specified--