

# **Recursion Operator for Narita-Itoh-Bogoyavlensky Lattice**

***J.P. Wang***

*University of Kent, Canterbury, United Kingdom*

*e-mail address: j.wang@kent.ac.uk*

In this talk, I'll construct a recursion operator for the family of Narita-Itoh-Bogoyavlensky lattice equations using its Lax presentation and present their bi-Hamiltonian structures. Moreover, I'll show that this highly nonlocal recursion operator generates infinitely many local symmetries.