Discrete integrable systems and Yang–Baxter maps

SOTIRIS KONSTANTINOU-RIZOS

Centre of Integrable Systems
P.G. Demidov Yaroslavl State University, 150003 Yaroslavl, Russia
skonstantin84@gmail.com

In this talk we give an introduction to the theory of discrete integrable systems and the theory of Yang–Baxter maps. In particular, first we discuss a particular class of partial difference equations, the so-called equations on quad-graphs, and we explain what integrability means for such equations. Then, we give an introduction to the theory of Yang–Baxter maps and we explain their relation with quad-graph equations. We explain what integrability means for Yang–Baxter maps.