Rota-Baxter operators and elliptic curves

Cristian Anghel

"Simion Stoilov" Institute of Mathematics of Romanian Academy, Bucharest, Romania
e-mail: `Cristian.Anghel@imar.ro`

The Rota-Baxter operators have a long history, with manny applications in both pure mathematics and theoretical physics. After a short review of this subject, I will present a class of Rota-Baxter operators comming from the world of vector bundles over elliptic curves. If time permits we will see also some connections with modular forms/functions.