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Dynamical r -matrices and bundles on elliptic curves

At the level of loop algebras, there is an equivalence between the integrable systems defined using r -matrices and the Hitchin systems for rigid holomorphic bundles over a Riemann surface. The latter generalise to cases when the bundle is not rigid. On the level of loop groups, however, there does not seem to be a suitable generalisation. An exception is provided by the dynamical r -matrices of Felder, Etingof, Varchenko *et al.*, which turn out to correspond to G -bundles over an elliptic curve. We develop the geometry of this moduli space, which allows a fairly exhaustive elucidation of the Poisson geometry of the dynamical r -matrix. (joint with E. Markman)