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Jacques Hurtubise* (jacques.hurtubise@mcgill.ca), Dept. Mathematics and Statistics,
McGill University, 805 Sherbrooke St. W., Montreal, Quebec H2V 2W8, Canada. *Geometry of
isomonodromic deformations.*

We consider the geometry behind the Hamiltonian structure of isomonodromy deformations of connections on vector bundles over Riemann surfaces. The main point is that one should think of an open set of the moduli of pairs (V, ∇) of vector bundles and connections as being obtained by “twists” supported over points of a fixed vector bundle V_0 with a fixed connection ∇_0 ; this gives two deformations, one, isomonodromic, of (V, ∇) , and another induced from the isomonodromic deformation of (V_0, ∇_0) . The difference between the two will be Hamiltonian. (Received September 01, 2009)