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Diego E. Dominici* (dominid@newpaltz.edu), 1 Hawk Dr., New Paltz, NY 12561. *Lax pairs as a bridge between integrable systems and special functions*. Preliminary report.

One of the central ideas in the theory of integrable systems is the fact that each integrable nonlinear problem can be represented as the compatibility condition between two linear equations of a Lax pair.

In this talk, we will present some connections between Lax pairs, the Toda lattice, orthogonal polynomials, and differential-difference equations. (Received February 21, 2016)