

Symplectic forms for integrable models and Seiberg-Witten theory

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We construct a symplectic form in terms of Lax pairs which unifies the symplectic forms known before for a wide variety of integrable models. This symplectic form also applies to the Seiberg-Witten solution of many supersymmetric gauge theories. We discuss the solution of some of these theories, including some new spin chain models, twisted and untwisted Calogero-Moser systems, and the corresponding moduli spaces of spectral curves.