

## **Poisson Sigma Model and Quantization of Integrable Systems**

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### **Abstract**

Geometrically, an integrable system on a symplectic manifold can be regarded as a Lagrangian fibration. In this talk the semiclassical asymptotic of scalar products of eigenfunctions of two integrable systems on a symplectic manifold will be reformulated as a semiclassical partition function for the Poisson sigma model with boundary conditions determined by corresponding Lagrangian fibrations. Here the Poisson sigma model is a two dimensional topological field theory with the target space being the symplectic manifold which is the phase space for the two integrable systems.