1030-35-254   **Mikhail Kovalyov*** (`mkovalyo@ualberta.ca`), Canada. *On a class of nonlinear wave-particle solutions of integrable systems.*

In this talk I discuss a class of solutions of integrable systems that exhibit both wave and particle like properties. I will show how they can be used to construct a nonlinear analogue of the Fourier transform and how the wave - and particle-like properties are balanced by means of an uncertainty principle. (Received August 05, 2007)