Songhao T Li* (sli@math.utoronto.ca), Department of mathematics, Toronto, Ontario M5S 2E4, Canada. Symplectic Groupoids of Radko Surfaces. Preliminary report.

In 2001, Crainic and Fernandes gave an integrability criterion for Poisson manifolds by a formal construction of the symplectic groupoid. The previsiously known examples include Lie-Poisson structure and Poisson Lie groups. In her thesis (2002), Olga Radko classified a generic class of Poisson structures on surfaces. In this talk, we will give an geometric construction of the symplectic groupoids of these Radko surfaces. The main technique is blow-up's. This is ongoing work under the supervision of Marco Gualtieri and Lisa Jeffrey. (Received September 09, 2010)