Jiaqi Liu* (jliu@math.toronto.edu), Robert Jenkins, Peter Perry and Catherine Sulem.
Inverse scattering transform with arbitrary spectral singularities.

For the AKNS system Xin Zhou in his dissertation developed an inverse scattering mechanism to deal with non-generic initial data that allow arbitrary number of spectral singularities. In this talk, we give a self-contained and constructive characterization of the scattering data and discuss its applications to the global well-posedness problem to the dnls equation. This is joint work with R. Jenkins, P.Perry and C. Sulem. (Received August 17, 2018)