1120-35-30   **Barbara Prinari***, University of Colorado Colorado Springs, Colorado Springs, CO, **Gino Biondini**, State University of New York at Buffalo, Buffalo, NY, **Daniel Kraus**, State University of New York at Buffalo, Buffalo, NY , and **Federica Vitale**, University of Salento, Lecce, Italy. *Dark-bright soliton solutions with nontrivial polarization interactions for the three-component defocusing nonlinear Schrödinger Equation.*

In this talk we will present novel dark-bright soliton solutions for the three-component defocusing nonlinear Schrödinger equation with nonzero boundary conditions. The solutions are obtained within the framework of a recently developed inverse scattering transform for the underlying nonlinear integrable PDE, and unlike dark-bright solitons in the two component (Manakov) system in the same dispersion regime, their interactions display non-trivial polarization shift for the two bright components. (Received January 26, 2016)