1067-35-571 Y. Ohta*, Rokko, Kobe, 657-8501, Japan. Dark and bright soliton solutions for coupled derivative nonlinear Schrödinger equation.

Coupled derivative nonlinear Schrödinger equations of focusing and defocusing types are studied by using the direct method of soliton theory. The equations are transformed into bilinear form and the dark and bright soliton solutions are given in terms of determinants and Pfaffians. Interactions of these solitons are also discussed. (Received September 09, 2010)