

1126-35-226

**Yuan Zhou\*** ([zhouy@mail.usf.edu](mailto:zhouy@mail.usf.edu)), Department of Mathematics & Statistics, University of South Florida, 4202 East Fowler Ave, CMC 014, Tampa, FL 33620-5700, and **Wen-Xiu Ma** ([mawx@cas.usf.edu](mailto:mawx@cas.usf.edu)). *Bilinear differential forms and applications.*

The Hirota bilinear method is an effective approach to integrable equations. Integrable equations are transformed into bilinear forms, including Hirota forms and generalized bilinear forms, under the logarithmic dependent variable transformations. In this talk, we will discuss about subspaces of solutions to integrable equations by the linear superposition principle. The considered equations possess generalized bilinear forms and the resulting solutions contain solitons, lumps and complexitons. (Received January 14, 2017)