

1127-35-305

Gro Hovhannisyan, Oliver Ruff* (oruff@kent.edu) and **Zijing Zhang**. *Higher-dimensional Darboux transformations*.

The classical one-dimensional Darboux transformation, intertwining two second-order partial differential operators, has many applications in the study of nonlinear dynamic equations, particularly in the generation of multi-soliton solutions. We discuss an n -dimensional generalization and apply it to some specific higher-dimensional examples. (Received February 06, 2017)