On Reductions of a Matrix Generalized Heisenberg Ferromagnet Equation

Tihomir Valchev

Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Bulgaria

E-mail: tiv@math.bas.bg

ABSTRACT

In this talk, we shall consider a 1+1 dimensional system of S-integrable nonlinear evolution equations. The integrable system represents a natural mathematical generalization of the classical 1+1 dimensional integrable Heisenberg ferromagnet equation describing waves in a spin chain. We shall also say a few words about some integrable deformations of the system.