

1114-35-80

Nan Lu* (nal314@lehigh.edu), 14 East Packer Ave, Bethlehem, PA 18015. *Equivariant and Self-similar Standing Waves for a Hamiltonian Spin-Field System.*

In this talk, I will discuss the joint work with Andrea Nahmod and Chongchun Zeng on the existence of equivariant solutions to a Hamiltonian hyperbolic-hyperbolic coupled spin-field system, where the spins are maps from \mathbb{R}^{2+1} into the sphere \mathbb{S}^2 or the pseudo-sphere \mathbb{H}^2 . This model was introduced by Martina *et al.* from the hyperbolic-hyperbolic generalized Ishimori systems. Relying on the hyperbolic coordinates, we prove the existence of equivariant standing waves both in regular hyperbolic coordinates as well as in similarity variables, and describe their asymptotic behavior. (Received August 10, 2015)