

Dissipative Waves in a Gravitating Quantum Field in the Non-Linear Schrodinger Equation Frame Work.

Rajkumar Roychoudhury

Department Mathematics, Bethune College Kolkata, India

E-mail: rroychoudhury123@gmail.com

ABSTRACT

Nonlinear wave propagation in a dissipative, self gravitating quantum fluid is studied in the frame work of NLS. The small amplitude analysis is done using Reductive Perturbation Technique to derive solitary wave structures.