

# On solutions for dispersive equations describing short-wave and long-wave interactions

Felipe Linares

IMPA

## Abstract

In this talk, we will describe recent results regarding the asymptotic behavior of solutions for a system of nonlinear dispersive equations called the Schrödinger-Korteweg-de Vries ( $S - KdV$ ) system. This system is a model that describes the interaction of long and short waves and has been studied in several areas of physics and fluid dynamics.