Department of Mathematics
Spring 2018 Colloquium Series

The Many Faces
of Dispersive Equations

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NOTE THE DATE: Wednesday, May 2, 2018

BSS 166, 4:00 pm

In this lecture I introduce one of the most famous equations in physics: the nonlinear Schrodinger equation. I will give a definition of dispersion and I will explain how dispersion and nonlinearity come together to generate solitons.

I will give an idea of how we are able to determine if such an equation has solutions and how we learn about their properties in spite of the fact that we do not have an explicit formula for them. If time permits we will also look at this equation as an infinite dimension Hamiltonian system and at some of the properties that we can prove for it and that generalize what we know in the infinite dimension case.
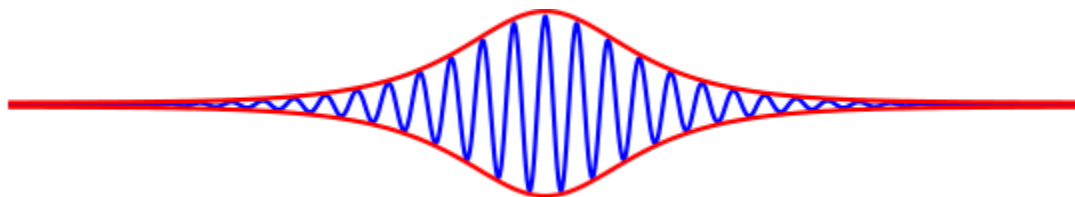

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For more info, go to http://www.humboldt.edu/math/news-and-events/math-colloquium

We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS building at 3:30 pm.