The Time Independent Schrödinger Equation is a useful tool for finding the bound states of a quantum system. As we look for a system with a reflection-less potential we tend to find connections to the $\text{sech}^2(x)$ function, hypergeometric functions and the soliton. From there we will take an in depth look into solitons; the discovery, their derivation from the Korteweg-deVries equation, and their interactions with other solitons.

**Friday, April 26, 2013**
**2:00 PM**
**DeLoach Hall, Room 212**