Math & Stat Colloquium
Friday, November 14
3:30pm BUS 216

Refreshments will be served in the Lund Hall Foyer at 3:00pm

Speaker: John Albert

"Multisoliton solutions of the Korteweg-de Vries equation"

Abstract: The Korteweg-de Vries equation is often described as an infinite-dimensional completely integrable Hamiltonian system, but it is not so easy to actually find solutions of the equation by "integrating" it. However, multisoliton solutions of the Korteweg-de Vries equation do satisfy ordinary differential equations which are completely integrable Hamiltonian systems in the classical, finite-dimensional sense, and which can therefore be solved by integration (at least in theory). The study of these ordinary differential equations has implications for the structure of multi-solitons and for their stability properties.