INSTITUTE COLLOQUIUM

Thursday, 9 January 2014   **4.00 pm**   **Fermion**

Speaker:
Sarbarish Chakravarty
Professor, Department of Mathematics, University of Colorado, Colorado Springs

Title:
Beach waves and Line-solitons of the KP equation

Abstract:

This talk is an overview of the recent developments in the study of the solitary wave solutions of the Kadomtsev-Petviashvili (KP) equation. These solutions are called Line-solitons, and they are known to describe small amplitude, weakly dispersive, quasi-two-dimensional, nonlinear waves in shallow water.
The nonlinear interactions among such obliquely propagating solitary waves generate interesting surface wave patterns observed in long, flat beaches.