



Πανεπιστήμιο Ιωαννίνων/University of Ioannina



Τμήμα Μαθηματικών/Department of Mathematics

ΕΒΔΟΜΑΔΙΑΙΑ ΣΕΜΙΝΑΡΙΑ ΤΜΗΜΑΤΟΣ ΜΑΘΗΜΑΤΙΚΩΝ
WEEKLY SEMINAR OF THE DEPARTMENT OF MATHEMATICS

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Nonlinear Waves — Still Many Surprises

The history of nonlinear waves is filled with important discoveries, one of them being the *soliton*, a stable localized wave. The phenomena was uncovered from studies of a lattice system—the so-called Fermi-Pasta-Ulam problem. This led researchers to the Korteweg-deVries equation, which has these special soliton solutions. Such localized waves occur widely in physical world. History, background, and applications to water waves and nonlinear optics will be discussed. In the latter case, *photonic graphene* will be highlighted as an area which exhibits surprising phenomena.

Αίθουσα Σεμιναρίων Τμήματος Μαθηματικών
Lecture Room of the Department of Mathematics

!!! Πέμπτη/Thursday 23 Οκτωβρίου/October 2014, 17:30 !!!