İSTANBUL TEKNİK ÜNİVERSİTESİ
MATEMATİK MÜHENDİSLİĞİ
BÖLÜM SEMİNERİ

Somayyeh ALIDOUST

Konuşmanın Başlığı: Statically Investigation on Surface and Nonsurface Gap Solitons at the Interface of Periodic Lattices

Konuşmanın Özeti: This work is about surface and nonsurface gap solitons that exist at the interface of two similar or different lattice or in one monotonic lattice. Gap solitons here investigated statistically and solitons modes, soliton solution region in band gap structure and energy flow are studied. It is found that if there isn't any interface in lattice, soliton modes can exist only because of nonlinearity and this mode are known as nonsurface solitons. Also stability of this solitons are studied by linear stability analysis. It is seen that soliton modes can be stable in most part of their existence region. But when approaching lower cut off one encounters week instability especially for mixed solitons.

<u>Tarih</u>: *21 Haziran 2017 Çarşamba*

<u>Seminer</u>: *14:00-16:00*

<u>Yer</u>: *Matematik Mühendisliği B1-326*

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