

ЦЕНТАР ЗА НЕЛИНЕАРНУ ДИНАМИКУ И АКТИВНЕ КОНСТРУКЦИЈЕ
МАШИНСКОГ ФАКУЛТЕТА У НИШУ



И
ПРОЈЕКАТ ON144002
ВАС ПОЗИВА ЈУ ДА УЧЕСТВУЈЕТЕ У РАДУ СЕМИНАРА

Нелинеарна динамика - Милутин Миланковић

У ЧЕТВРТАК , 5. APRILA 2007. године са почетком у 13,00 часова
у Лабораторији за експерименталну механику – 307.

Katica (Stevanović) Nedrih

одржаће предавање под називом

Hibridni sistemi i hibridne dinamike: Teorija i primene
Hybrid Systems and Hybrid Dynamics: Theory and Applications

Kratak sadržaj: A survey as review of author's research result in area of dynamics of coupled subsystems and coupled dynamical processes into hybrid systems are presented.

The sets of two or many coupled partial as well as partial integro-differential equations, and also partial fractional differential equations of transversal vibrations of a elastically, as well as visco-elastic, and also creep connected double beam, as well as double plate systems, and also axially moving double belt system have been derived. The beam's as well as plate's materials, and also belt's materials are elastic or viscoelastic or creeping and constitutive relations of stress-strain states are expressed through members with integral parts or of the fractional order derivatives.

The analytical solutions of the sets of two coupled partial as well as partial integro-differential equations, and also partial fractional differential equations of corresponding dynamical free and forced processes are obtained by using method of Bernoulli's particular integral and Lalace's transform method asymptotic averaged method.