SEMINAR ZAVODA ZA TEORIJSKU FIZIKU

(Zajednički seminari Zavoda za teorijsku fiziku,
Zavoda za eksperimentalnu fiziku IRB-a i Fizičkog odsjeka PMF-a)

Four types of (super)conformal mechanics

Francesco Toppan

CBPF, Brazil

Datum: srijeda, 02. srpnja 2014.
Vrijeme : **11:00 sati c.t.**
Mjesto: IRB, seminar ZTF-a, I krilo

Abstract:

I will discuss D-module reps of one-dimensional (super)conformal algebras and their associated superconformal mechanics. Four cases are obtained: homogeneous versus inhomogeneous and parabolic versus hyperbolic/trigonometric representations. The associated (super)conformal models contain no dimensional parameters only in the homogeneous parabolic case. In one dimension, the superconformal invariance does not imply supersymmetry leading to non-supersymmetric superconformal models. Several examples of one-dimensional (super)conformal sigma models are presented. The relevance to ordinary quantum mechanics is pointed out.

Voditeljica seminara:
Kornelija Passek-Kumerički
⟨*passek@irb.hr*⟩