

Seminarium Zakładu Fizyki Teoretycznej

Departament Badań Podstawowych
Narodowego Centrum Badań Jądrowych

18 kwietnia 2018 r. (środa), godz.12:15
pawilon NCBJ, sala 22, Hoża 69

dr Kamila KOWALSKA

"ASYMPTOTIC SAFETY IN THE LIMIT OF LARGE N"

ABSTRACT:

I will discuss the possibility of constructing asymptotically safe extensions of the Standard Model in the presence of a large number N of vector-like fermions. I will review how the resummation of an infinite tower of chain diagrams can generate an interacting UV fixed point in the renormalization group evolution of the gauge coupling, and discuss the impact of the same diagrams on the evolution of the Yukawa and quartic couplings. Phenomenological applications will be finally analyzed.

Serdecznie zapraszamy,

M. Kowal, W. Piechocki, L. Roszkowski, J. Skalski, L. Szymanowski