## Seminarium Studium Doktoranckiego NCBJ Poniedziałek, 26 marca, godzina 9:00 Sala 22 w NCBJ, Hoża 69

Speaker: Artur Miroszewski

(Studium Doktoranckie NCBJ)

## Title: Evolution in classical and quantum systems

Abstract: Although people tend to understand intuitively the passage of time, its status in physical theories is still puzzling. During the talk I will distinguish between notions of time and clocks and I will motivate why only the latter has a physical significance. Using this assumption I will introduce reformulated theory of classical mechanics in which one can easily change clock (so called pseudocanonical transformations) with respect to which the dynamics is observed. I will then quantize the new theory and study what impact the new formulation has on our basic understanding of quantum mechanics.