

## Seminarium Studium Doktoranckiego NCBJ

Poniedziałek, 1 października, godzina 9:00 Sala 22 w NCBJ, Hoża 69

**Speaker: Krzysztof Jodłowski (Studium Doktoranckie NCBJ)**

**Title:  $R(D)$  ( $R(D^*)$ ) anomaly in  $B(B^*) \rightarrow D \tau \nu$  decay vs 1-loop leptonic corrections in MSSM**

Abstract: Quotient of branching ratios for different final lepton states –  $R(D)$  ( $R(D^*)$ ) – measured by LHCb, Belle and BaBar, deviates from predictions of Standard Model by  $\sim 2\sigma$  ( $4\sigma$ ). One loop corrections in leptonic sector were calculated in Minimal Supersymmetric Standard Model. Scan over parameter space was done and it was found that MSSM corrections do not provide significant enhancement of  $R(D)$  ( $R(D^*)$ ), contrary to result given in <https://arxiv.org/abs/1604.03416>.

In second part of the talk, brief review of dark matter physics will be given, focusing on work done in BayesFITS group.