

New results of R-parity-violating MSSM contributions to neutral mesons' mixing

Saturday, 2 September 2017 15:35 (20 minutes)

Low-energy flavour observables provide powerful tests of physics beyond the Standard Model. We calculate $\Delta M_{B_d^0/B_s^0/K^0}$, arising from the respective neutral mesons' mixing, by using the R-parity-violating Minimal Supersymmetric Standard Model (RPV-MSSM) including the mixing effects induced by the bilinear RPV term in the superpotential. We take into account all contributions at the tree- and the one-loop level which arise due to new physics. While most partial results agree with the existing literature, we do find differences which we point out accordingly.

Primary authors: Dr DOMINGO, Florian (Instituto de Física Teórica UAM-CSIC); Prof. DREINER, Herbert (Physikalisches Institut, the University of Bonn); Dr KIM, Jong Soo (National Institute for Theoretical Physics, the University of the Witwatersrand); Dr KRAUSS, Manuel (BCTP, the University of Bonn); Dr VICTOR, Martin Lozano (BCTP, the University of Bonn); Mr WANG, Zeren Simon (BCTP, University of Bonn)

Presenter: Mr WANG, Zeren Simon (BCTP, University of Bonn)

Session Classification: Energy frontier physics beyond the standard model

Track Classification: 7) Energy frontier physics beyond the standard model