Concept of Anomalies and Introduction of the Wess-Zumino-Witten Action

Ardit Krasniqi Institute of Nuclear Physics Theory Group Seminar on July 12^{th} 2019

 ${\bf Johannes~Gutenberg\text{-}Universitt~Mainz}\\ {\bf akrasniq@students.uni\text{-}mainz.de}$

Abstract

Most of the time a symmetry of the classical theory is also a symmetry of the quantum theory based on the same Lagrangian. When it is not the symmetry is said to be anomalous. In this talk a pedagogical introduction into this subject is given.

Moreover, I will try to link the concept of anomalies to the Wess-Zumino-Witten Action, which allows the prescription of the odd intrinsic parity sector, by the example of the $\pi^0 \to \gamma \gamma$ decay.