



Contribution ID: 112

Type: **Talk**

***Leading talk* $K \rightarrow \pi\pi$ decays and the $\Delta I = 1/2$ rule**

Monday, 29 June 2015 14:30 (30 minutes)

CP violation was discovered in Kaon decays 50 years ago but still remains a challenge for theorists. A complete theoretical description will be a crucial test for the Standard Model and will provide us with a rich source of information on new physics theories. In the past recent years, realistic computations of A_2 , the amplitude of $K \rightarrow (\pi\pi)_{(I=2)}$, have become possible and reached a level of 10% accuracy. I will explain how this computation has become possible and will report on the other channel, much more challenging, in which the two-pion state has isospin $I=0$. I will also report on a possible explanation for the $\Delta I = 1/2$ rule, the fact the magnitude of the amplitude A_0 is around 20 times larger than the one of A_2 , although a naive computation only gives a factor of 2.

Primary author: GARRON, Nicolas (Plymouth University)

Presenter: GARRON, Nicolas (Plymouth University)

Session Classification: Parallel Session 1 - Goldstone Boson WG

Track Classification: Goldstone Boson Working Group