



Contribution ID: 21

Type: Oral

## Results and opportunities in pion and muon decay

*Tuesday, 12 October 2010 10:00 (30 minutes)*

This talk will review the motivation, present experimental status, and remaining opportunities in the precise determination of the parameters of rare pion and muon decays. A great deal of effort, much of it at PSI, has been devoted in recent years to such measurements, leading to considerable improvements in precision, and in theoretical bounds. All of the measurements discussed explore various possible extensions of the standard model through tests of lepton universality, of the CVC hypothesis and Cabibbo universality, or of the V-A nature of the weak interaction. Even after the experiments of the current generation are completed, there will remain considerable room for improvement, typically an order of magnitude in precision, to match the theoretical accuracy. This leaves open significant opportunities for the future of the field.

**Primary author:** POCANIC, Dinko (University)

**Presenter:** POCANIC, Dinko (University)

**Session Classification:** Session Tu - 1

**Track Classification:** Precision experiments with pions and muons