

Abstract

While within the standard model, $\mu \rightarrow eee$ is extremely suppressed, various beyond standard model scenarios can give rise to such a decay. Although, for the time being, no signal for $\mu \rightarrow eee$ has been found, in future such processes might be detected. Moreover new physics can include new sources of CP-violation.

I shall discuss the possibility of deriving the new CP-violating phases of new physics by measuring the polarization of the final particles emitted in this decay. I will first discuss in the general framework and then specialize to the R -parity violating MSSM.