



Contribution ID: 327

Type: **not specified**

Form factors of the $D \rightarrow \text{pion}$ and $D \rightarrow K$ semileptonic decays

Tuesday, 15 June 2010 15:10 (20 minutes)

We present lattice results for the form factors relevant in the $D \rightarrow \text{pion}$ and $D \rightarrow K$ semileptonic decays obtained from simulations with two flavors of dynamical twisted-mass fermions.

Results at four values of the lattice spacing, ranging from ~ 0.05 up to ~ 0.1 fm, allow a careful study of the discretization effects.

The application of Heavy Meson Chiral Perturbation Theory provides an extrapolation of our results for both the scalar and the vector form factors to the physical point with quite good accuracy, obtaining a nice agreement with the experimental data.

Please, insert your presentation type (talk, poster)

Talk

Primary authors: TARANTINO, Cecilia (University of Rome III and INFN - Roma Tre); MESCIA, Federico (Universitat de Barcelona); SIMULA, Silvano (INFN - Roma Tre); DI VITA, Stefano (University of Rome III and INFN - Roma Tre); LUBICZ, Vittorio (University of Rome III and INFN - Roma Tre)

Presenter: DI VITA, Stefano (University of Rome III and INFN - Roma Tre)

Session Classification: Parallel 29: Weak decays and matrix elements

Track Classification: Weak decays and matrix elements