



Contribution ID: 249

Type: Poster

## Test of the Standard Model description of rare $B$ decays using lattice QCD form factors

Tuesday, 24 June 2014 18:10 (2 hours)

This poster reviews our recent calculation of  $B \rightarrow K^*$ ,  $B_s \rightarrow \phi$ , and  $B_s \rightarrow K^*$  form factors using nonrelativistic heavy quarks and improved staggered quarks on MILC lattices. These unquenched calculations, performed in the low-recoil kinematic regime, provide a significant improvement over the use of extrapolated light cone sum rule results. We use the form factors along with Standard Model determinations of Wilson coefficients to give theoretical results for several observables. Noting that the experimental measurements for the  $B^0 \rightarrow K^{*0} \mu^+ \mu^-$  and  $B_s \rightarrow \phi \mu^+ \mu^-$  branching fractions are smaller at low-recoil than the Standard Model predictions, we perform a fit of the relevant Wilson coefficients using experimental and lattice results. The favored values hint at deviations from the Standard Model that are consistent with fits done by other authors using complementary theoretical and experimental inputs.

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**Session Classification:** Poster session

**Track Classification:** Weak Decays and Matrix Elements