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Unbinned analyses of $B^0 \rightarrow K^{*0} \mu^+ \mu^-$

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The LHCb experiment has produced many intriguing results presenting tensions with respect to the Standard Model. These anomalies point towards potential contributions from New Physics. In particular, the anomalies observed in the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ motivate unbinned analyses in dimuon invariant mass squared (q^2), where more information about the decay can be extracted. This talk will present an overview of the so-called 'z-expansion' amplitude analysis where Wilson coefficients and non-local hadronic contributions are directly measured in data, in addition to an amplitude analysis which corresponds to a quasi-model-independent measurement of the q^2 dependence of the transversity amplitudes.

Primary author: BIRCH, Matthew (Imperial College London)

Presenter: BIRCH, Matthew (Imperial College London)

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