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**Determination of the Collins Function from Di-Hadron Fragmentation in  $e^+e^-$  Annihilation** MATTHIAS GROSSE PERDEKAMP, DAVID MERTENS, RALF SEIDL, University of Illinois — The Collins function connects transverse quark spin with an observable azimuthal asymmetry of final state hadrons around the initial quark momentum direction. The Belle experiment has carried out a first measurement of Collins asymmetries for pion pairs produced in  $e^+e^-$  annihilation. We will present an extraction and parametrization of the favored and disfavored Collins fragmentation functions from the Belle fragmentation data as functions of the fractional hadron energy. We will discuss the sensitivity of the Belle data in discriminating between different possible functional forms for the Collins fragmentation function.

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