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Angular analysis of  $B \to J/\psi K^*$ ,  $B \to \psi(2S)K^*$  and  $B \to \chi_c 1K^*$ EMMANUEL LATOUR, Ecole Polytechnique, BABAR COLLABORATION — We present the angular analysis of  $B \to J/\psi K^*$ ,  $B \to \psi(2S)K^*$  and  $B \to \chi_{c1}K^*$ , using  $112fb^{-1}$  data of the BaBar detector at the PEP-II  $e^+e^-$  machine. This angular analysis aims at measuring the decay transversity amplitudes in absolute value and strong phases. This allows to probe the hadronic form factor models of Factorization scheme in color-supressed modes. This study represent an update with increased luminosity for  $B \to J/\psi K^*$  decays, the first BaBar measurement in  $B \to \psi(2S)K^*$ decays, and the first measurement ever in  $B \to \chi_{c1}K^*$  decays.

> Christopher Hearty University of British Columbia

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