

# Measurements of Tau Decays into Kaons at BaBar and Determination of $|V_{us}|$

Aleksandra Adametz<sup>(a)</sup> for the BaBar Collaboration

<sup>(a)</sup> Heidelberg University

We present recent measurements of  $\tau$ -lepton decays into final states with kaons, which are based on several hundred million  $\tau^+\tau^-$  pairs produced in electron-positron annihilation data collected with the BaBar detector.

These measurements can be used to determine the Cabibbo-Kobayashi-Maskawa matrix element  $|V_{us}|$  with a tiny systematic error and in three different methods affected by different systematic effects.

E-mail: aadametz@physi.uni-heidelberg.de