The Lifetime of the $\pi^+\pi^-$ atom, new results from DIRAC

Ludwig Tauscher for the DIRAC Collaboration ETH Zurich, Switzerland

We present an up-date of the result of DIRAC on the lifetime of the $\pi^+\pi^-$ atom in its ground state, published in [1]. The new result is based on the analysis of data measured by DIRAC in 2001 to 2003, and on a thorough study of systematic errors caused by event reconstruction and lifetime determination.

[1] B.Adeva et al., Phys. Lett. B619 (2005) 50.

E-mail: ludwig.tauscher@cern.ch