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【327】Barrel time-of-flight detector for the PANDA experiment at FAIR

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The P̄ANDA experiment at FAIR will perform high precision hardron physics experiments in the strange and charm quark sector using cooled beams of antiprotons at high luminosity with 1.5 GeV/c to 15 GeV/c momentum.

For the identification of low momentum charged particles with extreme accuracy the barrel time-of-flight (TOF) detector is one of the key components of P̄ANDA. The barrel detector has ˜1 m diameter, covering 22-140 degree lab angle. A single counter intrinsic time resolution of ˜60 ps has been reached.

In this talk I will present optimization of operational conditions and time resolution.

Authors: SUZUKI, Ken (Stefan Meyer Institute, Austrian Academy of Sciences); STEINSCHADEN, Dominik (Stefan Meyer Institute); ZIMMERMANN, Sebastian (Austrian Academy of Sciences (AT)); KRATOCHWIL, Nicolaus (Stefan-Meyer-Institut (OEAW)); GRUBER, Lukas (CERN); SCHWARZ, Carsten (GSI Darmstadt GmbH); ORTH, Herbert (GSI); SCHMITT, Lars (GSI Darmstadt); GOETZEN, Klaus (GSI Darmstadt); BRINKMANN, Kai-Thomas (Bonn University); LEHMANN, Albert (University Erlangen-Nuremberg); BÖHM, Merlin (Friedrich Alexander Universität Erlangen-Nürnberg, Erlangen, Germany); DUTTA, Kamal (Gauhati University, Physics Department, Guwahati, India); KUSHAL, Kalita (Gauhati University, Physics Department, Guwahati, India); CHIRITA MIHAILA, Marius Constantin (Austrian Academy of Sciences (AT))

Presenter: KRATOCHWIL, Nicolaus (Stefan-Meyer-Institut (OEAW))

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