New Trends in High-Energy Physics



Contribution ID: 99 Type: not specified

The Professional Precision Laser Inclinometer: the noise origins and data processing

For the Professional Precision Laser Inclinometer, the noise sources have been analyzed. The efficient methodic for these noises accounting proposed and realized. The PPLI measured intrinsic noise is $6\,10\text{-}12\,\text{rad/Hz}1/2$ in the Microseismic Peak frequency band of [0.1Hz: 1Hz]. For the day long oservation period the minimal spectral density of the PPLI measured signal was found to be $2,4\,10\text{-}11\text{rad/Hz}1/2$.

Authors: Mr DI GIROLAMO, Beniamino (CERN); Mr BUDAGOV, Julian (JINR); Mr LYABLIN, Mikhail (JINR)

Co-authors: Mr PLUZNIKOV, Andrey (JINR); Mr MERGELKUHL, Dirk (CERN); Mr SHIRKOV, Grigori (JINR); Mr TRUBNIKOV, Grigori (JINR); Mr GAYDE, Jan-Christophe (CERN); Mr AZARYAN, Nikolay (JINR); Dr GLAGOLEV, Vladimir (JINR)

Presenter: Mr LYABLIN, Mikhail (JINR)