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ESS WS scintillator system design and test results

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The WS superconducting systems are based on scintillator detectors and wavelength shifting fibers are mounted on the beam pipe. The detectors are coupled to long haul optical fibers, which carry the signals to custom front end electronics sitting in controls racks at the surface. The acquisition chain have been characterized at IHEP (Protvino), CERN PSB, COSY Juelich and SNS before installation in the ESS tunnel. The beam test results of this system design, differing from the standard approach where photomultipliers are coupled to the scintillator will be presented.

Footnotes

wire scanner, scintillator

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