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FIT: a scintillating-fiber tracker for new-generation space-borne experiments

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A new era of space missions is needed to address the unresolved questions raised by current experiments, and further advance our understanding of charged cosmic rays and gamma rays. The challenge of the direct detection at increasingly higher energies, combined with enhanced energy and angular resolutions, is shaping the design of future detectors. FIT is a modular, high-resolution particle tracking system made of scintillating fibers read out with silicon photomultipliers. A miniature of FIT, called MiniFIT, was designed, built and tested with particle beams at CERN. The FIT design, together with the design and physics performance of MiniFIT, will be presented in this contribution.

Eligibility for ”Best presentation for young researcher” or ”Best poster for young researcher” prize

Yes

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