

Publication

A plastic-BaF₂ phoswich telescope for charged/neutral particle and photon detection

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BaF₂ has become a very versatile scintillator for particle and photon detection commonly applied in medium and high energy physics experiments. The intrinsic properties allow particle identification via time-of-flight, Delta E-E and pulse-shape techniques. A new NE102A-BaF₂ phoswich detector using the standard TAPS crystals has been tested at relativistic energies. The drastically improved particle identification and first results obtained with a large annular forward wall consisting of 120 phoswich modules with 15mm NE102A attached to the BaF₂-crystal will be discussed in detail.

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