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## Development of a Front-End Electronics for YAC-III detectors of TibetASgamma experiment

*Saturday 1 August 2015 15:30 (1 hour)*

To measure the cosmic-ray composition at the knee energy region, Yangbajing Air shower Core (YAC) -III experiment is planned in Tibet, China.

We developed a front-end electronics to read out charge signal from YAC detectors.

The readout system consists of a charge-to-time converter circuit and a time-to-digital converter circuit.

The system has a linearity from less than 1 pC to more than 1000 pC to achieve

a wide readout range which is required to measure the burst size of air shower core from 1 MIP to  $10^6$  MIPs (Minimum Ionization Particle) with two photomultipliers of a YAC detector.

### Collaboration

– not specified –

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