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## Astroparticle Physics with the ARGO-YBJ Experiment

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The ARGO-YBJ experiment, installed at the Yangbajing Cosmic Ray Laboratory (Tibet, China), at 4300 m a.s.l., is a detector  $100 \times 110 \text{ m}^2$  large, made by a layer of Resistive Plate Counters (RPCs) consisting of a central carpet with almost full coverage extending over an area of about  $5.500 \text{ m}^2$ , surrounded by a guard ring with partial coverage. The high space-time granularity, the full-coverage technique and the high altitude location make this detector a unique device for a detailed study of the atmospheric shower characteristics with an energy threshold of a few hundred GeV. These properties in addition to the large field of view and the high duty cycle enable the ARGO-YBJ experiment to monitor the sky in a continuous way. Results have been reached in a wide variety of fields ranging from Gamma Astronomy, to Solar Physics, from Cosmic Rays composition to hadronic interactions and proton-antiproton ratio. A summary of all these results will be presented and reviewed.

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