

## Performance of Multigap Resistive Plate Chamber in Streamer and Avalanche Mode

*Wednesday, 10 February 2010 17:00 (2 hours)*

We have observed the performance of the multigap RPC in streamer and avalanche mode. The multigap RPC was designed to have improved time resolution compared to the single gap RPC. For this reason, we built five type of multigap RPC with a rectangular shape of glass electrode, size of 10 x 10 cm<sup>2</sup> and thickness of 1 and 2 mm. Multigap RPCs were operated with gas mixture of Ar, C<sub>4</sub>H<sub>10</sub>, C<sub>2</sub>H<sub>2</sub>F<sub>4</sub> and SF<sub>6</sub> for streamer and avalanche mode. We have obtained a preliminary result of the multigap RPC time resolution at high voltage plateau curve in streamer and avalanche mode. From results, the time resolution is considered to be inversely proportional to thickness of glass electrode.

In this conference we will be present more details of the multigap RPC performances.

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