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Streamer studies in resistive plate chambers

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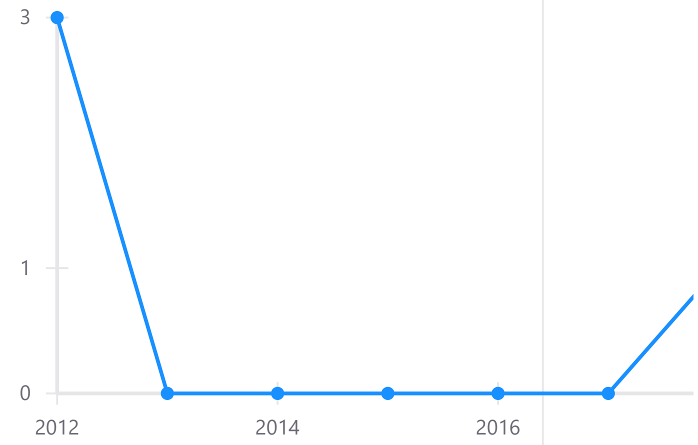

Abstract: (Elsevier)
Resistive Plate Chambers (RPCs) are widely used in high energy physics. While avalanche mode operation is mandatory in high rate environments (ATLAS and CMS experiments at LHC), streamer mode operation is often preferred in low rate applications b ecause of the high signal amplitude. Typical mixtures for streamer operation are composed of Argon, Tetrafluoroethane and Isobutane, with additions of SF_6 below 1% to reduce the charge delivered in the gas. In this paper, results about the streamer prope rties observed with different mixtures are presented.

resistive plate chamber avalanche argon gas: admixture carbon: hydrogen carbon: fluorine sulfur: fluorine efficiency streamer chamber time delay Show all (13)

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NOONE C 9 1999

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The BABAR RPC system

A. Zallo (Frascati)

Nucl.Instrum.Meth.A 456 (2000) 117-120 • DOI: 10.1016/S0168-9002(00)00975-X

edit

RPC systems for BELLE detector at KEKB

Belle Collaboration • M. Yamaga et al.

Nucl.Instrum.Meth.A 456 (2000) 109-112 • DOI: 10.1016/S0168-9002(00)00973-6

edit

Performance of glass RPC operated in streamer mode with SF-6 gas mixture

K. Abe (Tohoku U. and Tohoku Gakuin U. and Aomori U.), F. Handa (Tohoku U. and Tohoku Gakuin U. and Aomori U.), I. Higuchi (Tohoku U. and Tohoku Gakuin U. and Aomori U.), Y. Hoshi (Tohoku U. and Tohoku Gakuin U. and Aomori U.), N. Kawamura (Tohoku U. and Tohoku Gakuin U. and Aomori U.) et al.

Nucl.Instrum.Meth.A 455 (2000) 397-404 • DOI: 10.1016/S0168-9002(00)00518-0

edit

Gas mixture studies for streamer operation of Resistive Plate Chambers at low rate

A. Mengucci (Frascati), A. Paoloni (Frascati), M. Spinetti (Frascati), L. Votano (Frascati)

Nucl.Instrum.Meth.A 583 (2007) 264-269 • DOI: 10.1016/j.nima.2007.09.030

edit

Performance of glass RPC operated in streamer mode with four-fold gas mixtures containing SF-6

C. Gustavino (Gran Sasso), A. Candela (Gran Sasso), M. De Deo (Gran Sasso), M. D'Incecco (Gran Sasso), R. Moro (Gran Sasso)

Nucl.Instrum.Meth.A 517 (2004) 101-108 • DOI: 10.1016/j.nima.2003.09.059

edit

Resistive plate chambers performances at cosmic rays fluxes

SF-6 quenched gas mixtures for streamer mode operation of RPCs at very low voltages

G. Aielli (Rome U., Tor Vergata and INFN, Rome), P. Camarri (Rome U., Tor Vergata and INFN, Rome), R. Cardarelli (Rome U., Tor Vergata and INFN, Rome), A. Di Ciaccio (Rome U., Tor Vergata and INFN, Rome), L. Di Stante (Rome U., Tor Vergata and INFN, Rome) et al.

Nucl.Instrum.Meth.A 493 (2002) 137-145 • DOI: 10.1016/S0168-9002(02)01345-1

edit

Response of Streamer Tubes to Highly Ionizing Particles

G. Battistoni (Frascati), C. Bloise (Frascati), L. Liberatori (Frascati), L. Satta (Frascati)

Nucl.Instrum.Meth.A 270 (1988) 185 • DOI: 10.1016/0168-9002(88)90026-5

edit

NOONE N 7 1977

edit

Optical study of the features of the streamer images in RPC

K. Abe (Tohoku Gakuin U.), Y. Hoshi (Tohoku Gakuin U.), K. Kumagai (Tohoku Gakuin U.), K. Onodera (Tohoku Gakuin U.), N. Takahashi (Tohoku Gakuin U.) et al.

Nucl.Instrum.Meth.A 508 (2003) 34-37 • DOI: 10.1016/S0168-9002(03)01273-7

edit

Nucl.Instrum.Meth.A 533 169

edit

Streamer suppression with SF-6 in RPCs operated in avalanche mode

P. Camarri (Rome U., Tor Vergata and INFN, Rome), R. Cardarelli (Rome U., Tor Vergata and INFN, Rome), A. Di Ciaccio (Rome U., Tor Vergata and INFN, Rome), R. Santonico (Rome U., Tor Vergata and INFN, Rome)

Nucl.Instrum.Meth.A 414 (1998) 317-324 • DOI: 10.1016/S0168-9002(98)00576-2

edit