Quark Matter 2015 - XXV International Conference on Ultrarelativistic Nucleus-Nucleus Collisions



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Magnetic and Electric Fields in Heavy-ion Collisions

Tuesday 29 September 2015 16:30 (2 hours)

Heavy-ion collisions can generate very strong magnetic fields and also electric fields. We study the general properties of these fields, including the field strength, spatial distribution, collision-energy dependent, time evolution. We will also discuss how the event-by-event fluctuation affects the correlation between the azimuthal orientation of the fields and the participant matter geometry, namely, the participant planes. The implications of these results on the experimental searching of the chiral magnetic/separation effects, chiral electric separation effect will be also presented.

On behalf of collaboration:

NONE

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