

Fast embedding of jets in heavy-ion collisions for background studies with ALICE

Bastian Bathen, for the ALICE Collaboration

(Submitted on 16 Jun 2011)

Jet reconstruction in heavy-ion collisions is strongly affected by soft background from the underlying event. For an appropriate interpretation of the jet observables it is essential to understand the influence of the background and its fluctuations on the reconstructed jets. With this purpose we study random cones and the response of a known probe embedded in a heavy-ion events. The embedded probe can be a single high- p_T track or a jet from a simulated or real pp event. This allows a detailed study of background fluctuations and verification of the performance of background subtraction methods.

Comments: To appear in the proceedings of the 6th International Workshop High-pT physics at LHC, April 4-7th, 2011, 6 pages, 5 figures

Subjects: **High Energy Physics - Experiment (hep-ex)**; Nuclear Experiment (nucl-ex)

Cite as: [arXiv:1106.3212](https://arxiv.org/abs/1106.3212) [hep-ex]

(or [arXiv:1106.3212v1](https://arxiv.org/abs/1106.3212v1) [hep-ex] for this version)

Submission history

From: Bastian Bathen [[view email](#)]

[v1] Thu, 16 Jun 2011 12:21:38 GMT (45kb,D)

Which authors of this paper are endorsers?

Download:

- [PDF](#)
- [Other formats](#)

Current browse context:

hep-ex

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1106](#)

Change to browse by:

[nucl-ex](#)

References & Citations

- [INSPIRE HEP](#)
([refers to](#) | [cited by](#))
- [NASA ADS](#)

Bookmark([what is this?](#))



Science
WISE