6th DRD1 Collaboration Meeting



Contribution ID: 31 Type: not specified

Use of Oxygen in Drift Chamber: comparison with Garfield (remote)

Wednesday 8 October 2025 11:20 (20 minutes)

We examined the algorithm used in Garfield++ for computing the electron attachment in gaseous mixtures and we found that it can be corrected by hand to take into account the contributions of individual gases to the attachment mechanism. We applied the revised calculation to compute the electron attachment as a function of the electric field and compared the results with some experimental results, obtaining reasonable agreement for mixtures containing noble gases, isobutane and oxygen.

Presenter: FABRIZIO CEI

Session Classification: Working Group 4: Detector physics, simulations, and software tools