

Study on space-time structure of Higgs-jet with the HBT correlation method in e^+e^- collision at $\sqrt{s} = 250$ GeV

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The space-time structure of the Higgs boson decaying into hadron-jets (Higgs-jets) is carefully studied with the HBT correlation method using e^+e^- collision events produced by the Monte Carlo generator PYTHIA 8.219 at $\sqrt{s} = 250$ GeV. The measurement of the Higgs boson radius and decay lifetime are derived from the HBT correlation of the final state pions, with an upper bound of $R_H \leq 1.03 \pm 0.05$ fm and $\tau_H \leq (1.29 \pm 0.15) \times 10^{-7}$ fs. This result is consistent with CMS data.

Type

Parallel talk

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