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

Friday, 21 December 2018 16:15 (15 minutes)

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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