

The Standard Model predicts existence of one Higgs boson with combined parity  $CP = +1$ . In MSSM there exist Higgs boson with  $CP = -1$  in addition. The work develops one method of Higgs boson CP determination on the basis of angular correlations of pions and  $\rho$ -mesons born in cascade decay  $H/A \rightarrow \tau^- \tau^+ \rightarrow \rho^- / \pi^- \nu_\tau \rho^+ / \pi^+ \bar{\nu}_\tau$ . The calculations are done in the leading order of perturbation theory. Further, the possibility of signal (Higgs boson decay) and background ( $Z$  boson decay) differentiation is studied. The processes in question are simulated using Monte Carlo generators Pythia and Tauola. Simulation outputs are compared with calculated theoretical results.