

Search for a Light Standard Model Higgs Boson

in the $H \rightarrow WW^{(*)}$ Channel.

lili Chu Physics Department at Buffalo

lilichu@buffalo.edu

Abstract:

For a mass M_H in the range $120 < M_H < 160 \text{ GeV}/c^2$, there exist the Higgs boson decay channel $H \rightarrow WW^{(*)}$. And I will use PATHIA software to generate the event data, then use the C++ do the data analysis. In the data analysis, the main method used is Monte Carlo simulation.

Reference:

1. CMS Note 2006/114
2. PATHIA Manual
3. Phy.Rev.Lett. 61 678-681 (1988)
- 4.