INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS
AMSTERDAM 2002

Abstract ID=ABS400
Beyond the Standard Model (experiment and theory)
Experiment: L3 Collaboration
Contact Person: Juan Alcaraz
Institute: CERN
Email: Juan.Alcaraz@cern.ch

Search for a fermiophobic Higgs boson at L3

L3 Collaboration

Abstract

A search is performed for a Higgs boson decaying into photons or W bosons, using the data collected by the L3 detector at center-of-mass energies up to 209 GeV at LEP. We consider all channels of $hZ \to \gamma\gamma f\overline{f}$ and of the process $hZ \to WW^* f\overline{f}$. We discuss techniques used in the search, and present limits on the mass, production and decay properties of a Higgs in the standard fermiophobic scenario.

Version 1
Date 2002-04-30 : 10:02:28'