

High Energy Physics - Experiment

Search for Higgs boson production in dilepton and missing energy final states with 5.4 fb⁻¹ of p-pbar collisions at sqrt(s)=1.96 TeV

The [D0 Collaboration](#)*(Submitted on 25 Jan 2010 (v1), last revised 13 Feb 2010 (this version, v3))*

A search for the standard model Higgs boson is presented using events with two charged leptons and large missing transverse energy selected from 5.4 fb⁻¹ of integrated luminosity in p-pbar collisions at sqrt(s)=1.96 TeV collected with the D0 detector at the Fermilab Tevatron Collider. No significant excess of events above background predictions is found, and observed (expected) upper limits at 95% confidence level on the rate of Higgs boson production are derived that are a factor of 1.55 (1.36) above the predicted standard model cross section at Higgs boson mass of 165 GeV.

Comments: 7 pages with 2 figure and 2 table; updated to reflect published version

Subjects: **High Energy Physics - Experiment (hep-ex)**

Journal reference: Phys.Rev.Lett.:104,061804(2010)

DOI: [10.1103/PhysRevLett.104.061804](https://doi.org/10.1103/PhysRevLett.104.061804)

Report number: FERMILAB-PUB-10-015-E

Cite as: [arXiv:1001.4481v3](#) [hep-ex]

Submission history

From: Michael Kirby [[view email](#)]

[\[v1\]](#) Mon, 25 Jan 2010 16:40:59 GMT (73kb)

[\[v2\]](#) Wed, 3 Feb 2010 21:06:05 GMT (74kb)

[\[v3\]](#) Sat, 13 Feb 2010 16:58:07 GMT (74kb)

[Which authors of this paper are endorsers?](#)

Download:

- [PostScript](#)
- [PDF](#)
- [Other formats](#)

Current browse context:

hep-ex

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1001](#)

References & Citations

- [SLAC-SPIRES HEP](#)
([refers to](#) | [cited by](#))
- [CiteBase](#)

Bookmark([what is this?](#))

