

Table of Contents

Georgi-Michacek Model	1
Extended Scalars Group Coordinators.....	1
Available Tools.....	1
Available Results.....	1
Benchmarks.....	1
Meetings.....	1

Georgi - Machacek Model

Extended Scalars Group Coordinators

Xiaohu Sun (ATLAS), Raffaele Gerosa (CMS), Heather Logan, Rui Santos, Oscar Stal, Shufang Su (theory)

Available Tools

- [VBF@NNLO](#) (*M Zaro et al.*) Cross sections for VBF production of h , H , H^0 , H^{\pm} , $H^{\pm\pm}$.
- [GMCALC](#) (*H. Logan et al.*) Spectrum calculator. Includes a routine to generate a `param_card.dat` file for use with the UFO file included in the FeynRules implementation.
- [FeynRules implementation](#) (*K. Kunal et al.*)

Available Results

- [LHCHXSWG-2015-001 \(CDS record\)](#), "Recommendations for the interpretation of LHC searches for H^0 , H^{\pm} , and $H^{\pm\pm}$ in vector boson fusion with decays to vector boson pairs" (*H. E. Logan and M Zaro*). *Cross sections for VBF production of H^0 , H^{\pm} , $H^{\pm\pm}$, and $H^{\pm\pm}$ (NNLO QCD) at 8 and 13 TeV and decay widths to two vector bosons (tree level) for masses between 200 GeV and 2 TeV.*

Benchmarks

- **H[±] plane:** (*Heather Logan*) Benchmark over the m_h - s_H plane for 200 GeV < m_h < 2000 GeV.
<https://twiki.cern.ch/twiki/pub/LHCPhysics/LHCHXSWGGMh5plane-benchmark.pdf>

Meetings

- WG3: Extended Scalars meeting (2HDM Singlets/Triplets) 2015-02-24
- WG3: Extended scalars benchmarking 2015-09-10

-- MarioPelliccioni - 2015-01-26

This topic: LHCPhysics > LHCHXSWGGM

Topic revision: r6 - 2015-09-10 - LoganExternal



Copyright © 2008-2019 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

Ideas, requests, problems regarding TWiki? Send feedback