

# Introduction

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LHXS WG3 NMSSM Meeting  
March 7, 2018

# Goals

- Group mandate to cover topics related to NMSSM:
  - Heavy and light Higgses
  - CP violation
  - SUSY partners
  - Dark matter
- In coming meetings, re-launch and consolidate studies towards LHXSWG white paper on NMSSM:
  - Benchmark points, planes, etc
  - Uncovered channels
  - Interpretations / re-interpretations
  - Build on work done in YR4
- *Your contributions are very important and will have an impact on the NMSSM domain!*

# NMSSM group information

- Twiki: <https://twiki.cern.ch/twiki/bin/view/LHCPhysics/LHCHXSWG NMSSM>
- Mailing lists:
  - Group members: [lhc-higgs-nmssm@cern.ch](mailto:lhc-higgs-nmssm@cern.ch)
  - Conveners: [lhc-higgs-nmssm-convener@cern.ch](mailto:lhc-higgs-nmssm-convener@cern.ch)
  - Instructions to subscribe:  
<https://twiki.cern.ch/twiki/bin/view/LHCPhysics/LHCHXSWG HiggsMailingList>
  - *Please don't hesitate to use mailing lists to share ideas, discuss, etc!*
- SVN repository to store code, etc:  
<https://svnweb.cern.ch//cern/wsvn/lhchiggsxs/repository/NMSSM/>

# Today's agenda

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## NMSSM Subgroup of LHC HXSWG3

Wednesday 7 Mar 2018, 10:00 → 12:00 Europe/Zurich

160-R-009 (CERN)

Abideh Jafari (CERN), Eric Feng (CERN), Florian Staub (KIT - Karlsruhe Institute of Technology (DE)),  
Milada Muhlleitner (KIT - Karlsruhe Institute of Technology (DE)), Ulrich Ellwanger (University Paris 11)

Videconference  
Rooms

LHXS\_WG3\_-\_NMSSM

Join

160-R-009

10:00 → 10:05 **Introduction**

5m

**Speakers:** Abideh Jafari (CERN), Eric Feng (CERN), Florian Staub (KIT - Karlsruhe Institute of Technology (DE)), Milada Muhlleitner (KIT - Karlsruhe Institute of Technology (DE)), Ulrich Ellwanger (University Paris 11)

LHXS WG3 NMSSM...

10:10 → 10:20 **Phenomenological NMSSM race for 125 GeV Higgs boson**

10m

**Speaker:** Shahu Abdus Salam (Shahid Beheshti University (IR))

10:30 → 10:40 **Disentangling mass-degenerate NMSSM Higgs bosons at the LHC**

10m

**Speaker:** Dr. Shoaib Munir (KIAS, Seoul)

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10:50 → 11:00 **Benchmark planes in the NMSSM**

10m

**Speaker:** Sven Heinemeyer (CSIC (Madrid, ES))

sven.pdf

11:10 → 11:20 **Efficient scanning technique of highly correlated NMSSM parameter space**

10m

**Speaker:** Wim De Boer (KIT - Karlsruhe Institute of Technology (DE))