# Summary of BSM group activities

**Mikael Berggren**[1]

[1]DESY, Hamburg

ILD phone meeting, 25 Jan 2017

# Ongoing analyses

1. Higgsinos (J. Yan, T. Tanabe, & al.)
2. Parameter extraction from results of (1)(S-L Lehtinen, H. Baer & al.)
3. STC4 (M.B., S. Caizza)
4. WIMPs (M. Habermehl, T. Tanabe & al.)
5. SUSY "Point 5" (M. Chera)
6. FCNC in top (F. Zarnechi)

In red: Talks today - In blue: Talks next BSM-focus meeting.

- New topics are welcome! Some ideas:
  - Dark-sector WIMPs decaying in the detector.
  - Lighter-than-125 Higgs(like) states, eg. nMSSM singlet.
  - Direct signs of extra dimensions.

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# Support report to the ICFA answer to MEXT

Reminder: Outline the capabilities of ILC for discovery of new particles if LHC sees

1. no new physics, OR
2. relatively light new physics, OR
3. new physics beyond direct ILC reach.

The answer, as we all already know, is that it doesn't matter what LHC sees.

However, the emphasis between direct observation (the topic of the ILD-BSM group), and indirect observation (The topic of the Higgs and Top/EW groups) changes.

The report is now under-going final edits, and will be made public before the end of January, ie. in one week.

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**NOTE**

This report clearly is about the capabilities of a 500 GeV ILC! Staging is *not* considered.

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# Organisational

- Conveners: M.B. (mikael.berggren@desy.de) and Jacqueline Yan (jackie@post.kek.jp).
- Mailing list:
  - Send mail to sympa@desy.de with "SUBSCRIBE ild-physics-bsm *firstname lastname*" as subject.
  - Wait for an OK from the maintainers (M.B. and Jackie).
  - This list is for people *active* in BSM analyses in ILD (and their supervisors).

- Request to give talks to ild-physics-conveners@desy.de.
- We intend to setup regular BSM working-group phone meetings, where more detailed discussions can take place.
- Details and time-slot to be worked out.

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