

# HiggsAutomator mini-workshop

Mini-workshop on automating Higgs and BSM calculations



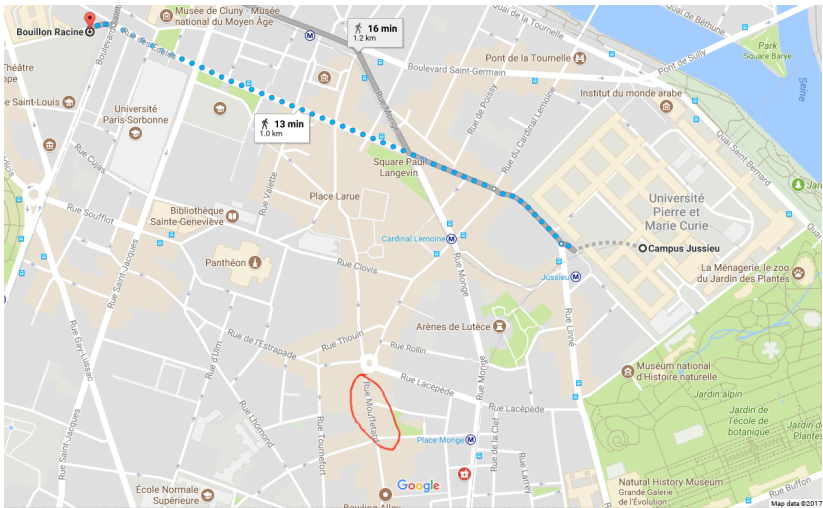
Welcome!

Herzlich Willkommen!

Bienvenue !

## Practical info

- Library is at our disposition until 11:00 on Thursday → the AV room after that.
- Coffee and pastries at 9:30 on Wednesday and Thursday
- Lunch on Wednesday at Jussieu canteen
- Dinner on Wednesday at 19:30 at Bouillon Racine
- Lunch at 12:00 à l'Ardoise
- No secretaries here today, but please see them on Wednesday/Thursday



# Context for this meeting

The old ways are in trouble:

- For years, the dominant paradigm was SUSY, and it was a good idea to find the most minimal models possible → CMSSM, mSUGRA, MGM.
- Lots of work was put into hardcoding results for the MSSM: SPheno, SoftSUSY, SuSpect, FeynHiggs, SuSHi etc.
- But now the “demise” of the CMSSM/mSUGRA in terms of interpretations of LHC results is however already old news
- The MSSM in general is looking less natural, people are definitely turning to alternatives: e.g. NMSSM, Dirac gauginos, non-SUSY such as THDM, GM, etc etc.

Going off the beaten track is now much easier to do:

- The rise of generic tools makes it much easier to study other cases.
- E.g. CalcHEP and MicrOmegas as forerunners.
- SARAH/FlexibleSUSY
- MadGraph/Whizard with UFO from Feynrules, LanHEP,
- SModelS, FastLim, MadAnalysis, CheckMATE, ...

## Context for this meeting

What is this meeting for?

- As almost the entire “generic” community, to determine long-term goals and some cohesion. There are enough of us work together to make sure that we’re acknowledged and taken seriously, and convert more people!
- Work out what directions are worth pursuing in improving spectrum generation ... [see Florian’s talk](#)
- ... and how we can improve integration with other tools [see Hua-Sheng and Stefan’s talks](#)
- To determine who is interested in what? It would be good to coordinate efforts
- Another thing I’d like to ask is: what lessons can be learned from the “coup de théâtre” that the GAMBIT people achieved ... [see Julia’s talk](#)

and of course:

- To be able to meet everyone and discuss in a focussed and friendly way
- And to have a couple of (hopefully) good meals together ...

