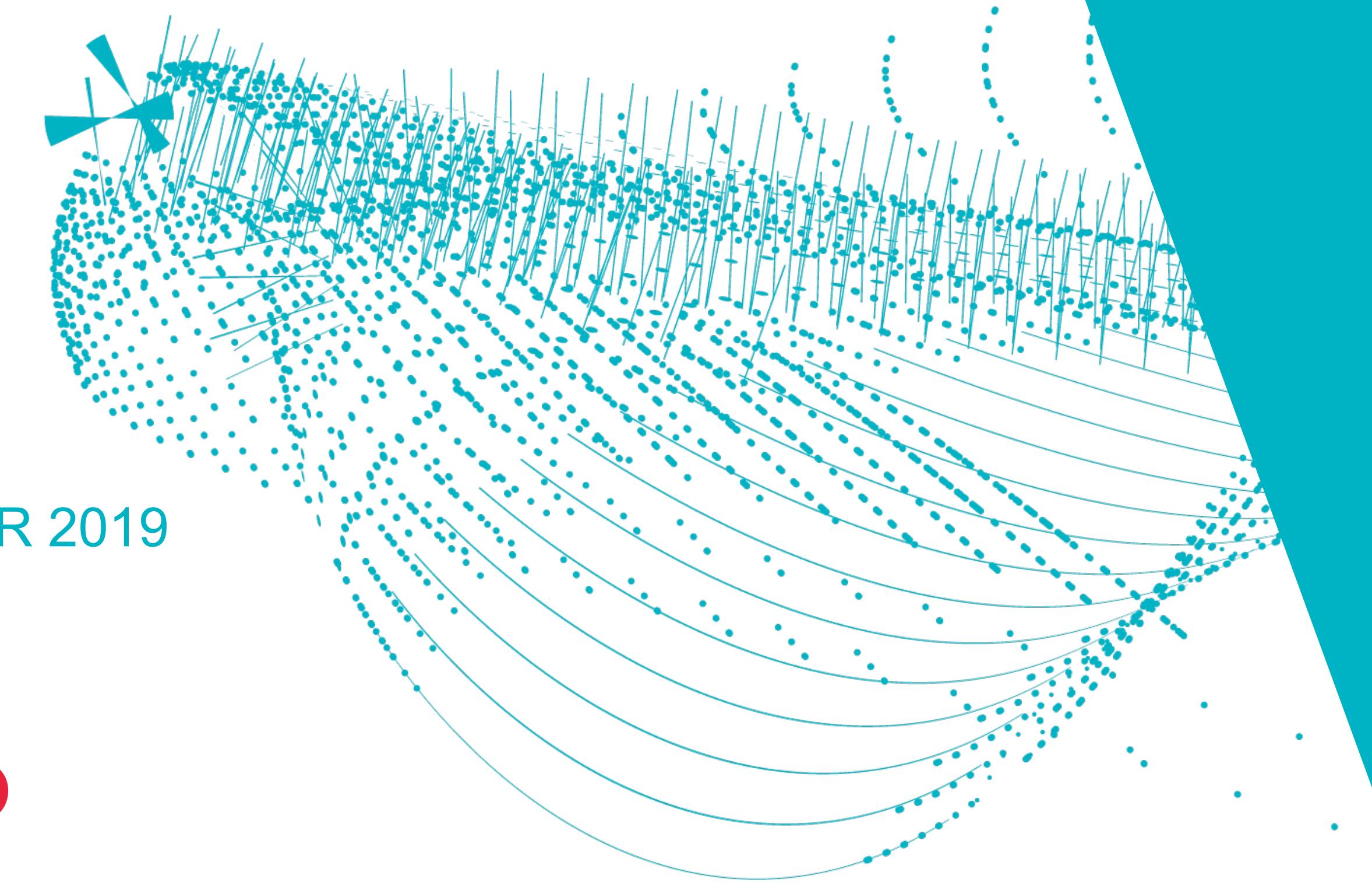




NIKHEF JAMBOREE, AMSTERDAM, 16-17 DECEMBER 2019

# THEORY GROUP INTRODUCTION



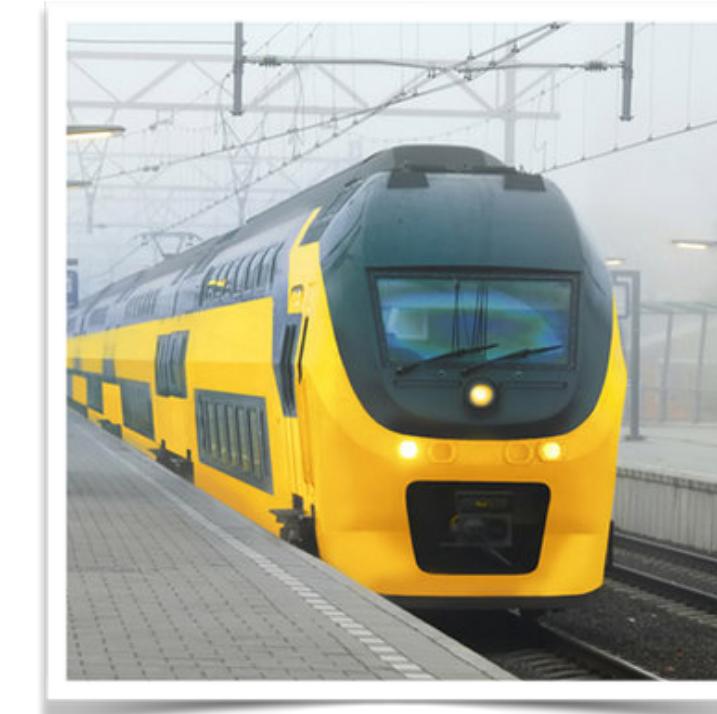
Robert Fleischer

# DUTCH THEORETICAL PARTICLE PHYSICS

- Amsterdam: Nikhef, VU, UvA
- Nijmegen: Radboud Universiteit
- Groningen: Rijksuniversiteit
- Utrecht: Universiteit Utrecht
- Leiden: Universiteit Leiden
- Maastricht: Maastricht University

## Nikhef Theory Groups

- *Large community:*
  - O(45) staff members
  - O(60) postdocs
  - O(100) PhD students



[No theoretical particle physics at Technical Universities]

# NIKHEF THEORY GROUP AMSTERDAM

- Broad spectrum of research topics:
  - Collider, flavour and BSM physics
  - Strong interactions - QCD
  - Cosmology, dark matter...
- We serve as a national centre for particle physics phenomenology.
- Close interaction with experimental groups: *exciting opportunities @ Nikhef*



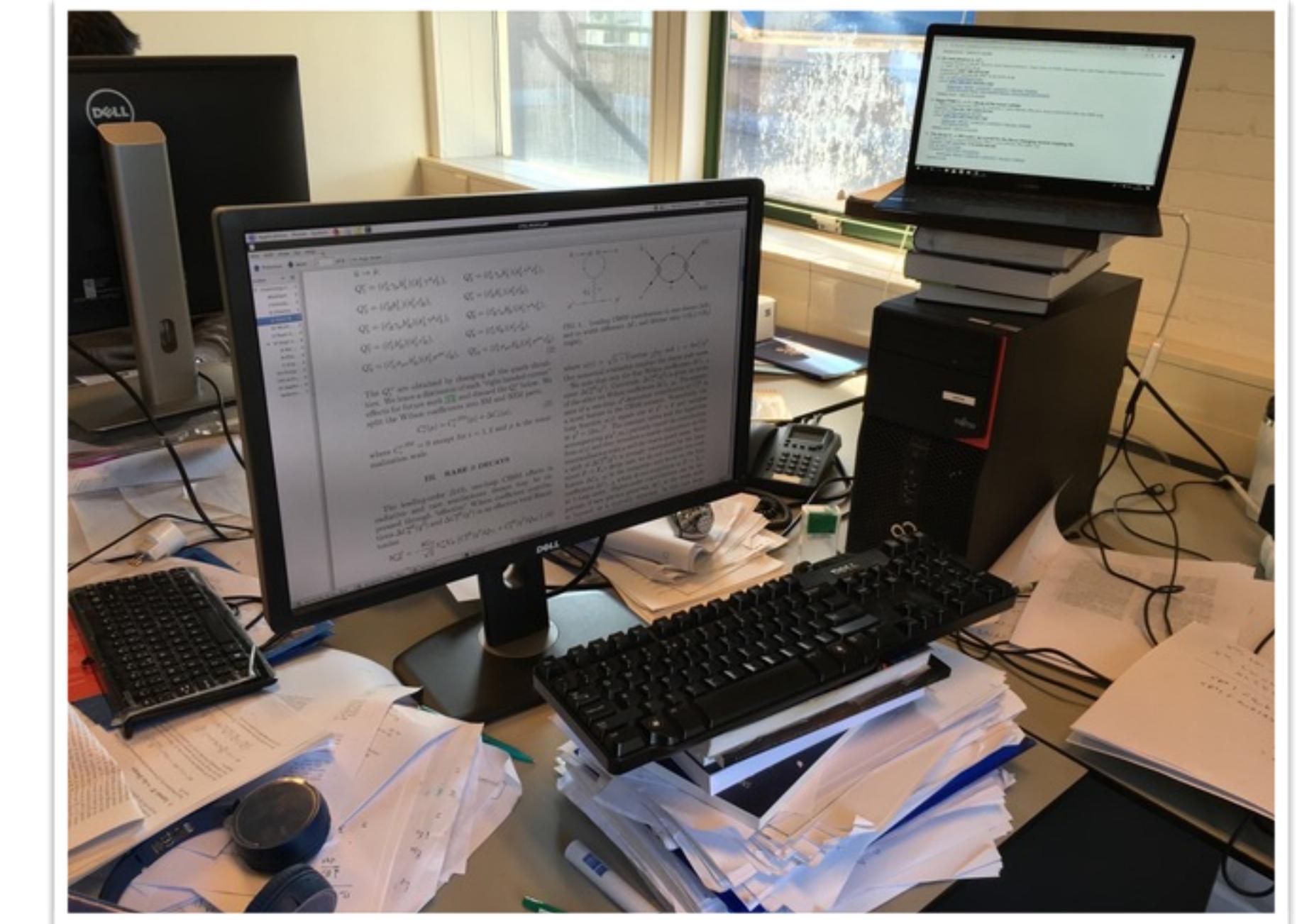
# THEORETICAL PHYSICS: “INSTRUMENTATION”



(i) Brainstorming

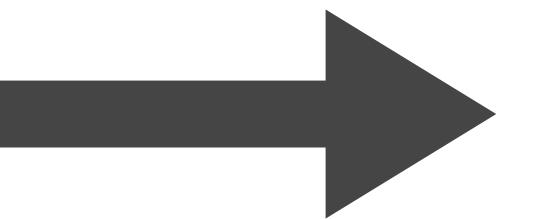
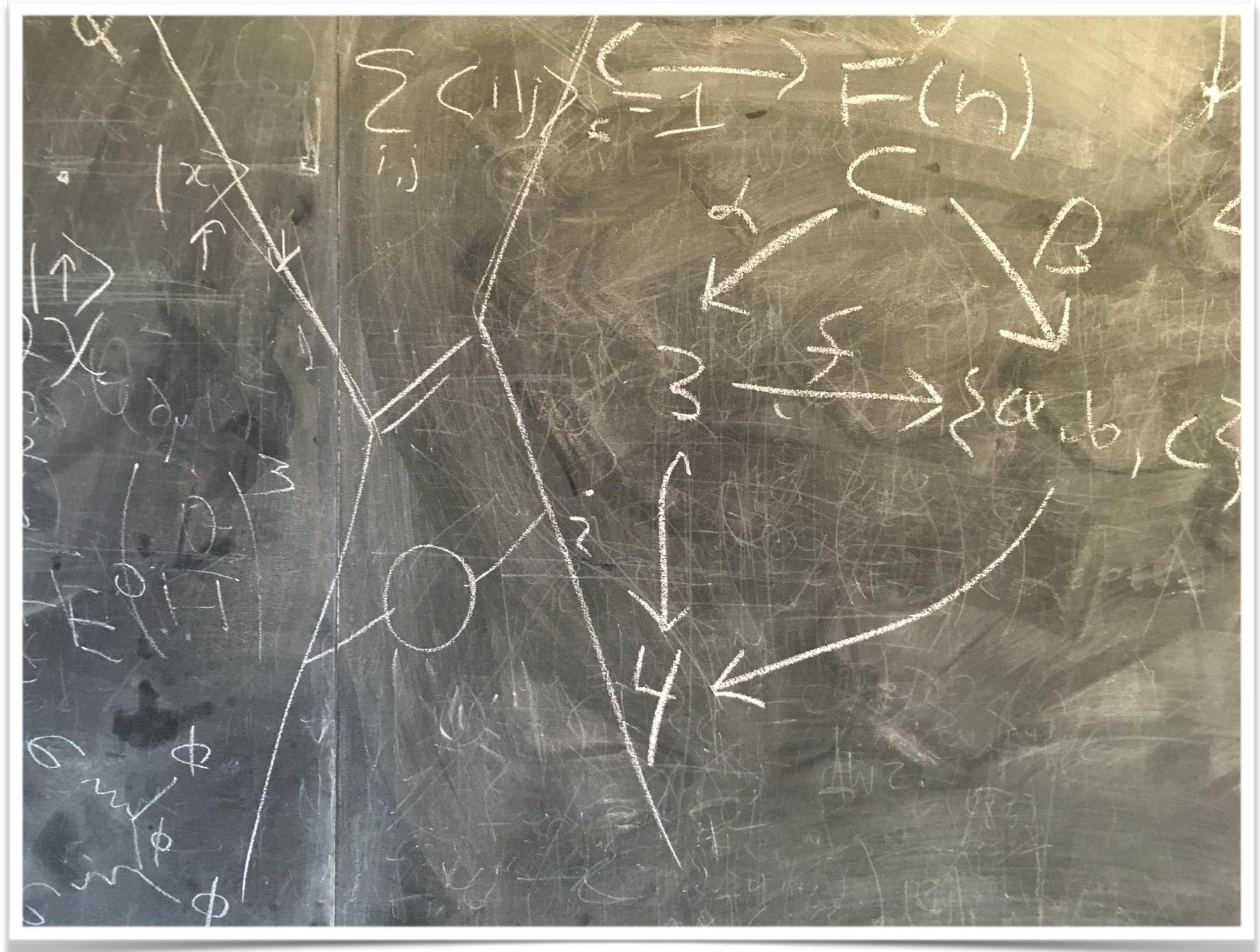


(ii) Thinking



(iii) Calculating...

# ... SOMETIMES (!?):



# PLANNED FUTURE RESEARCH

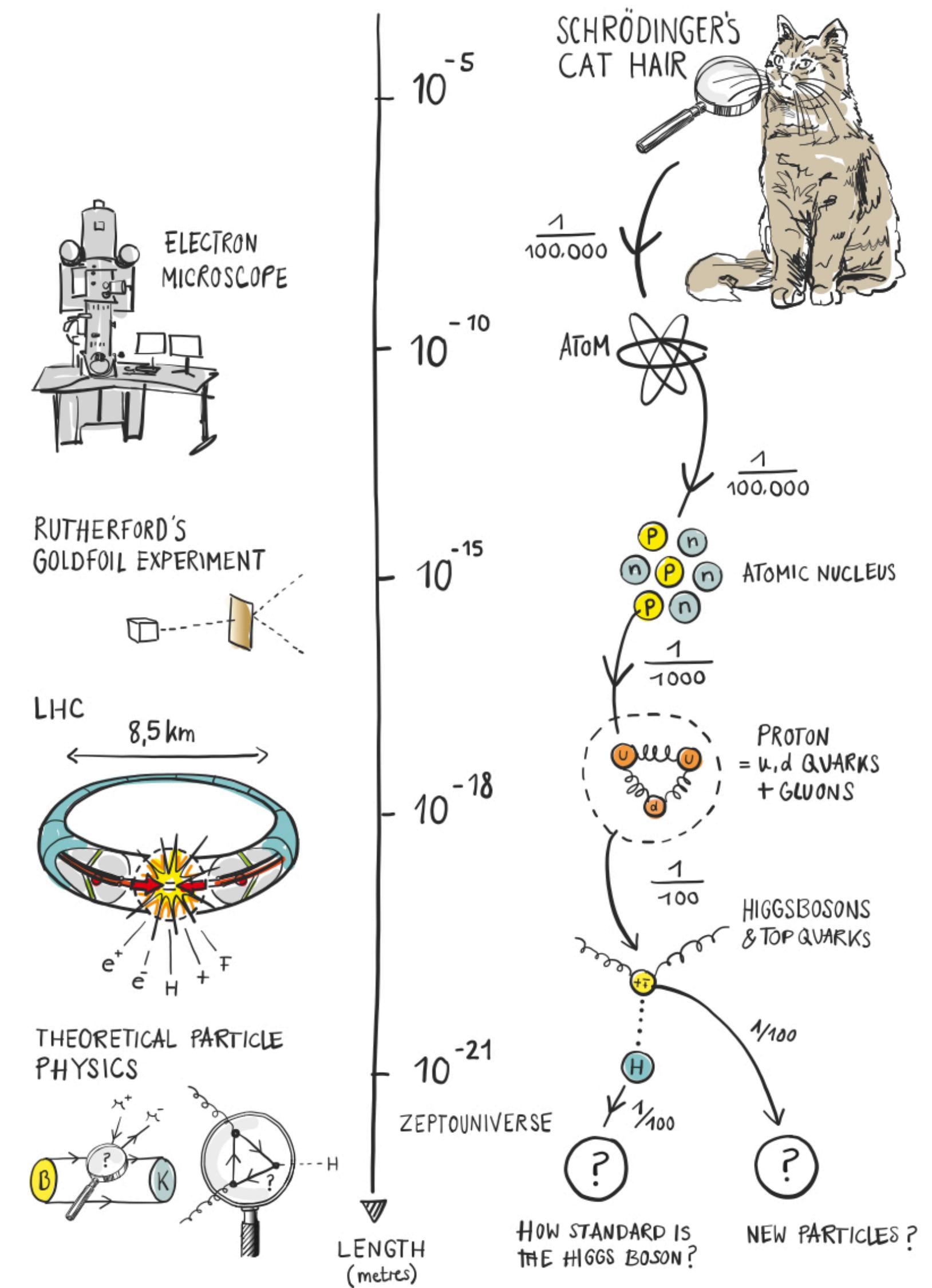
## *A journey into the zeptouniverse*

$$[10^{-21} \text{ m} \leftrightarrow 10^{15} \text{ eV}]$$

### Submitted NWO GROOT Proposal :

- ▶ Consortium of 11+5 theorists
- ▶ Nikhef+RU+RUG+UvA+VU+UU
- ▶ Requesting 7 PhD and 4 PD positions

[NWO assessment in progress]

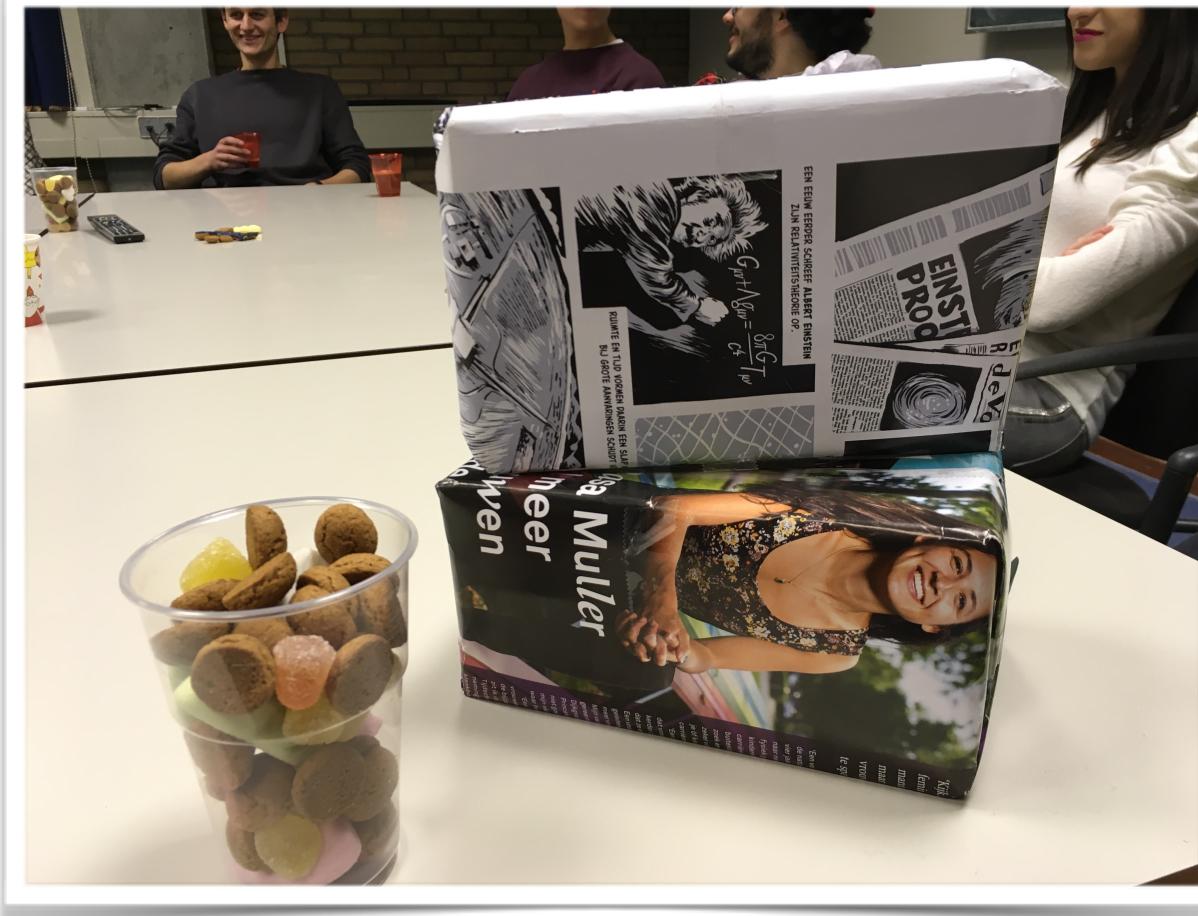
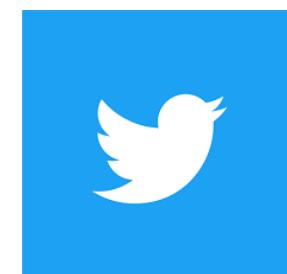


# LIFE @ NIKHEF THEORY: SOCIAL MEDIA CHANNELS

Instagram



Twitter



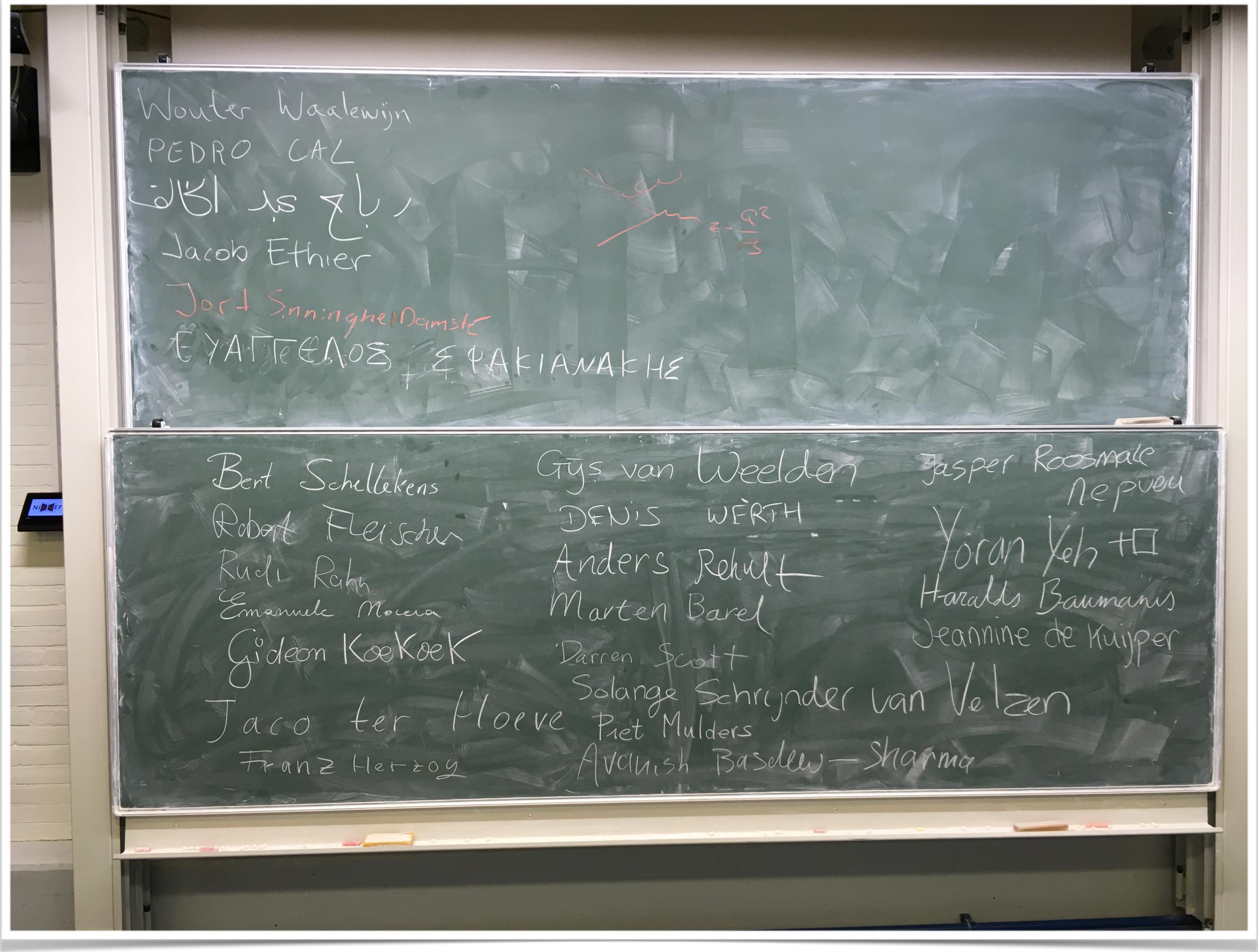
Are you already following us?

# SCIENTIFIC PROGRAMME OF THIS SESSION:

## *The Quest for Physics Beyond the Standard Model*

- Melissa van Beekveld [PhD]:  
SUSY, are you dead yet?
- Jort Sinnenhe Damste [PhD]:  
Theorist's Tools for Precision Physics
- Emanuele Nocera [Postdoc (Marie Curie)]:  
Precision, Data and Fits at the LHC





Enjoy!

[Theory Group “Welcome Meeting” (Autumn 2019)]