

# Portrait Dortmund Theory



# Group Prof. Dr. Gudrun Hiller

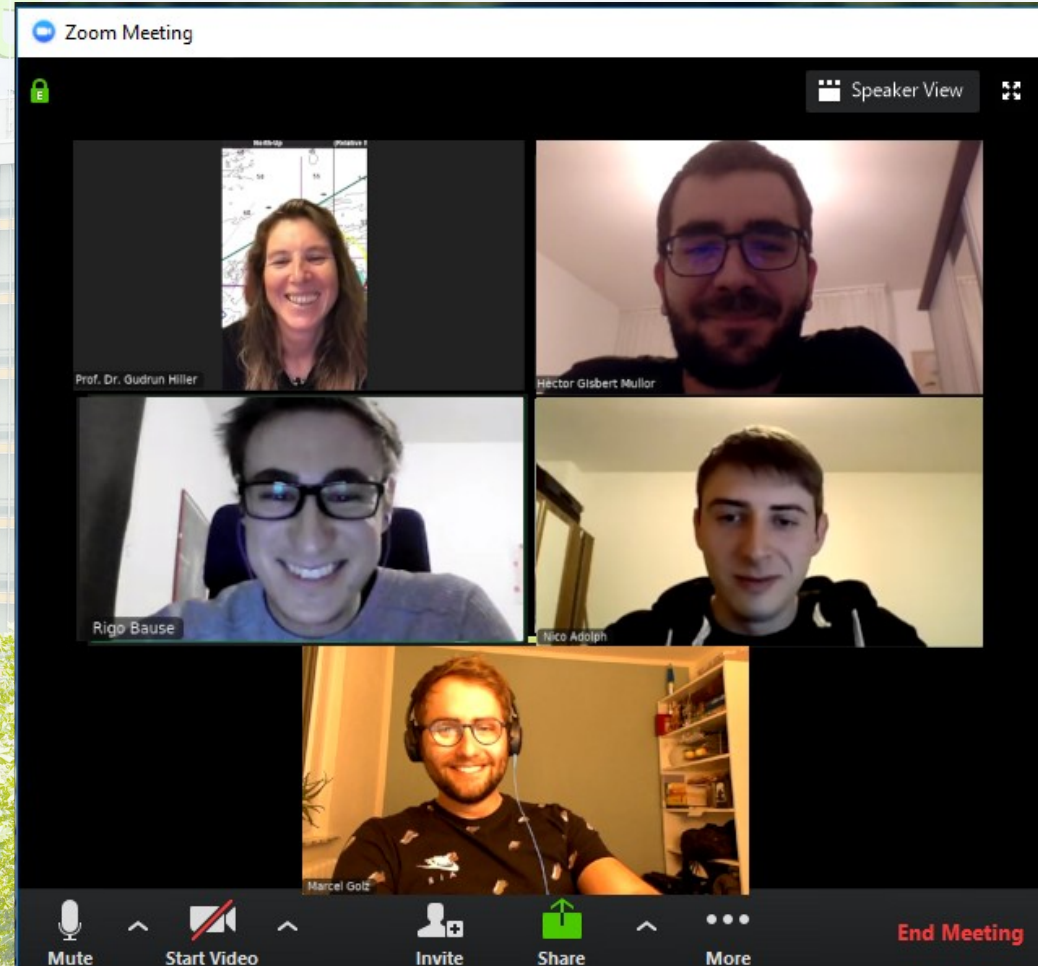
- Physics beyond the Standard Model
- Flavor and Rare Decays
- Charm Physics
- Asymptotic Safety
- $t$  &  $b$  physics in SMEFT

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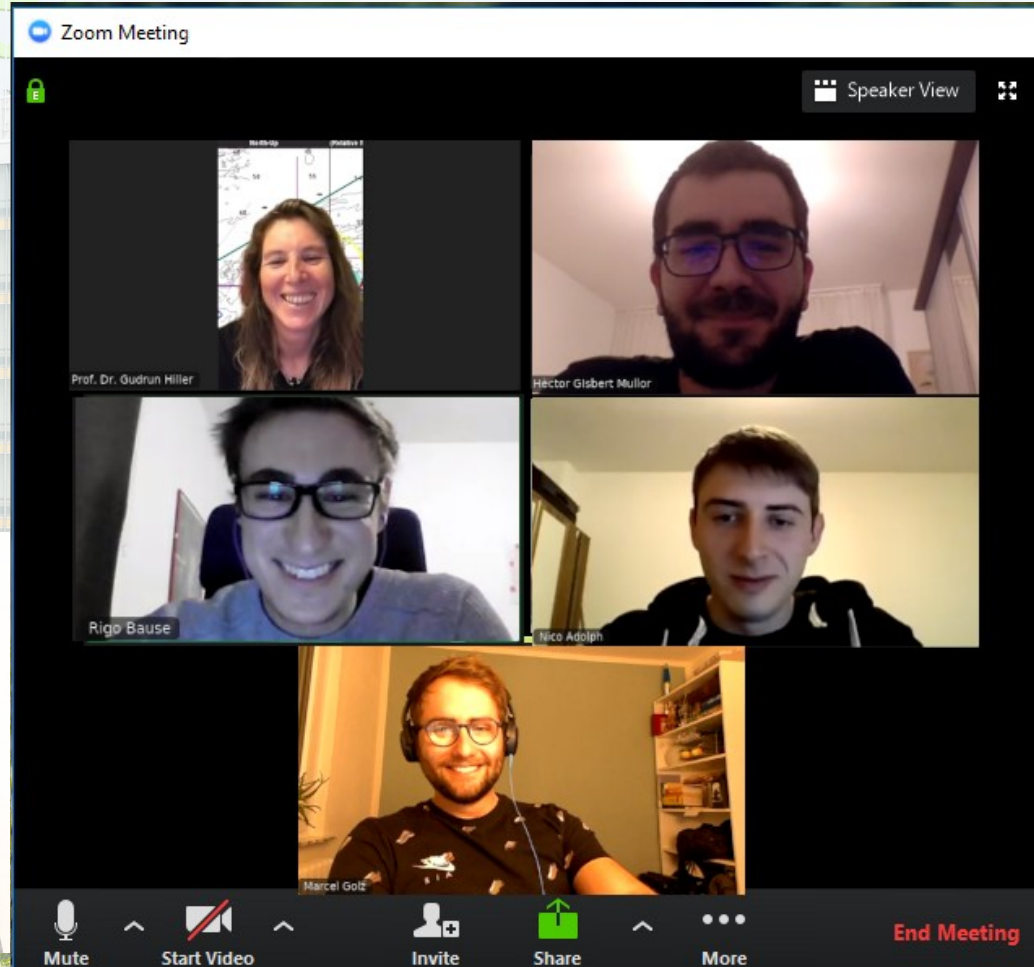
# Charm

- Prof. Dr. Gudrun Hiller
- Dr. Héctor Gisbert-Mullor
- Rigo Bause
- Nico Adolph
- Marcel Golz
- Tom Magorsch
- Master Student:  
Dominik Suelmann



# Charm

- Radiative charm decays
- Semileptonic dilepton & dineutrino modes
- CP violation
- SM null tests
- Model building



# BSM, Asymptotic Safety, Top & Bottom

- Prof. Dr. Gudrun Hiller
- Dr. Tom Steudtner
- Tim Höhne
- Lara Nollen
- Master students: Miriam Simm,  
Daniel Wendler



# BSM, Asymptotic Safety, Top & Bottom

- Model building
- Asymptotic Safety, Planck Safety
- Flavor hierarchies
- collider signatures of BSM theories
- $t$ ,  $b$  – physics using SMEFT



# Group Jun.-Prof. Dr. Emmanuel Stamou

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- Dr. Mustafa Tabet
- Jordi Folch Eguren
- Master Student: Jan Ellbracht
  
- B and Kaon flavor physics
  - CP violation
  - $R_{K^{(*)}}, B_q \rightarrow \mu^+ \mu^-$
  - $\epsilon_K, K \rightarrow \pi \nu \bar{\nu}$
  - ...
  
- Dark matter, BSM
  - Axions, Higgs flavor, ...

