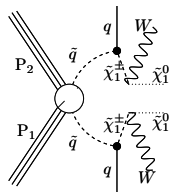


Search for new physics with disappearing tracks

- Facilitators: Sam Bein, Lisa Benato, Viktor Kutzner, Karla Pena, Melanie Eich

- MSSM sectors predict $c\tau \sim 1\text{-}1000$ cm charginos



- New search for tracks that terminate in CMS tracker. Students will
 - receive signal model and background ntuples, short track selection
 - optimize a signal region, measure prompt/fake background, uncertainty
 - unblind portion of data, interpret result
- Background estimation methods to be developed in next 3-4 months, 1 month to evaluate uncertainties/interpret, 1 month to condense
- Special requirements: bird/condor access
- Relevant short exercises: LL-tracking-vertex, jets, MET