



# *FCC-ee studies during IAP*

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# *Welcome to FCC-ee*

January for FCC-ee was an active period

- Participants from MIT, Maryland and Purdue
  - Maryland: Aneesh, Caitlin, Georg, Jaime, Joshua R., Othello, Sarah, Satvik
  - Purdue: Andrew W., Nikhil, Caden
  - MIT: Ayman, Casey, Nate, Tim, Charlotte, Isabella, Kristian, Peyton, Saina, Chinar
- Directing: Jan, Luca, Chris, Andreas and CP

Today

- Summary talks about work done during the IAP project
- Short discussion on results and what worked and what did not ....
- Dinner at the 'Mad Monkfish' on Mass Avenue in Cambridge

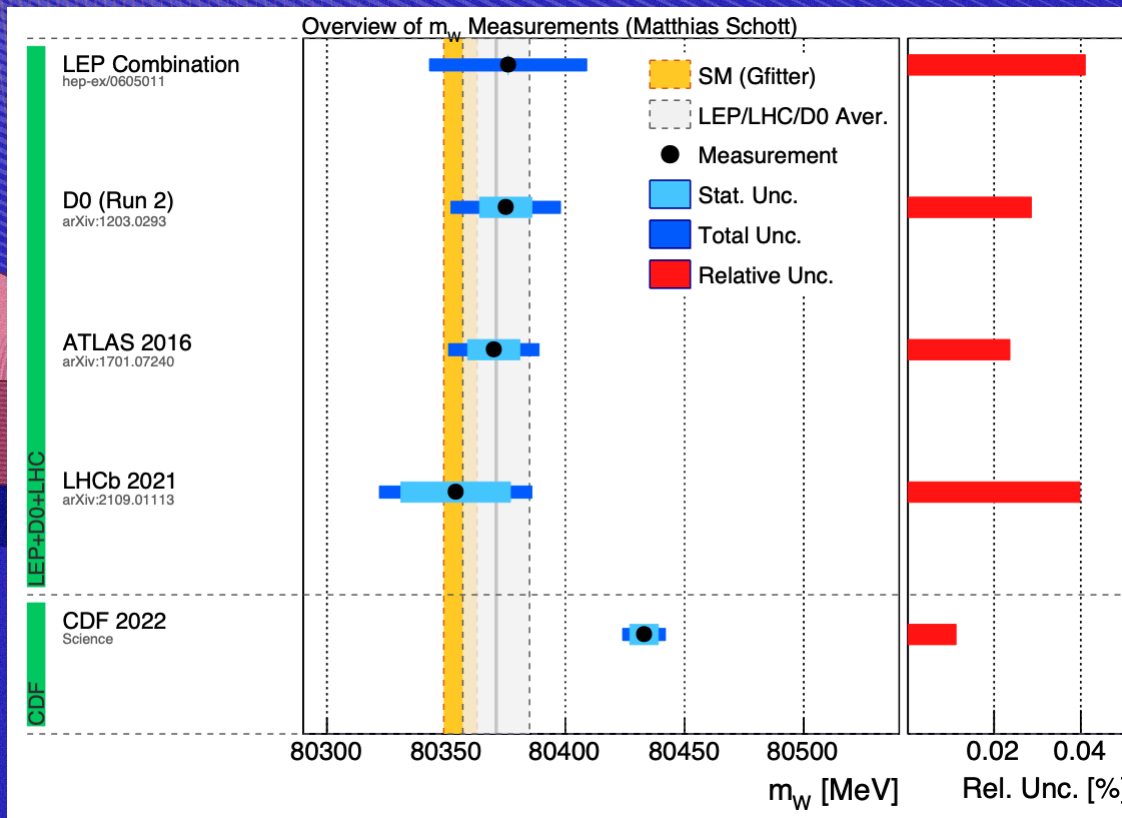
What is next?

- 'Real' US FCC workshop is in March ... we need to refine what we have
- We need to organize weekly progress meetings and some lectures
- Spring/Summer projects to go to CERN, Fermilab, or stay at MIT

# Why do precision EW?

CDF experiments last word

- $W$  mass too heavy by seven standard deviations !



Source: <https://non-trivial-solution.blogspot.com/2022/04/do-we-have-finally-found-new-physics.html>

Source: <https://www.quantamagazine.org/fermilab-says-particle-is-heavy-enough-to-break-the-standard-model-20220407/>