

Welcome to the PCTS workshop: Triggering on New Physics at the HL-LHC

Welcome and Thank You for Joining!

Thanks to Princeton Center for Theoretical Science

- ▶ The center opened to encourage the cross-collaboration among different disciplines
 - ▶ While perhaps many of you already know each other, we hope you take this opportunity to connect people from different areas!
- Please take advantage of the surrounding tables for discussion or work
- **We have a spare conference room near the entrance for connecting to remote meetings**
- Perhaps we create a sign up sheet for shared rides to the airport

Triumph Brewing Monday Evening

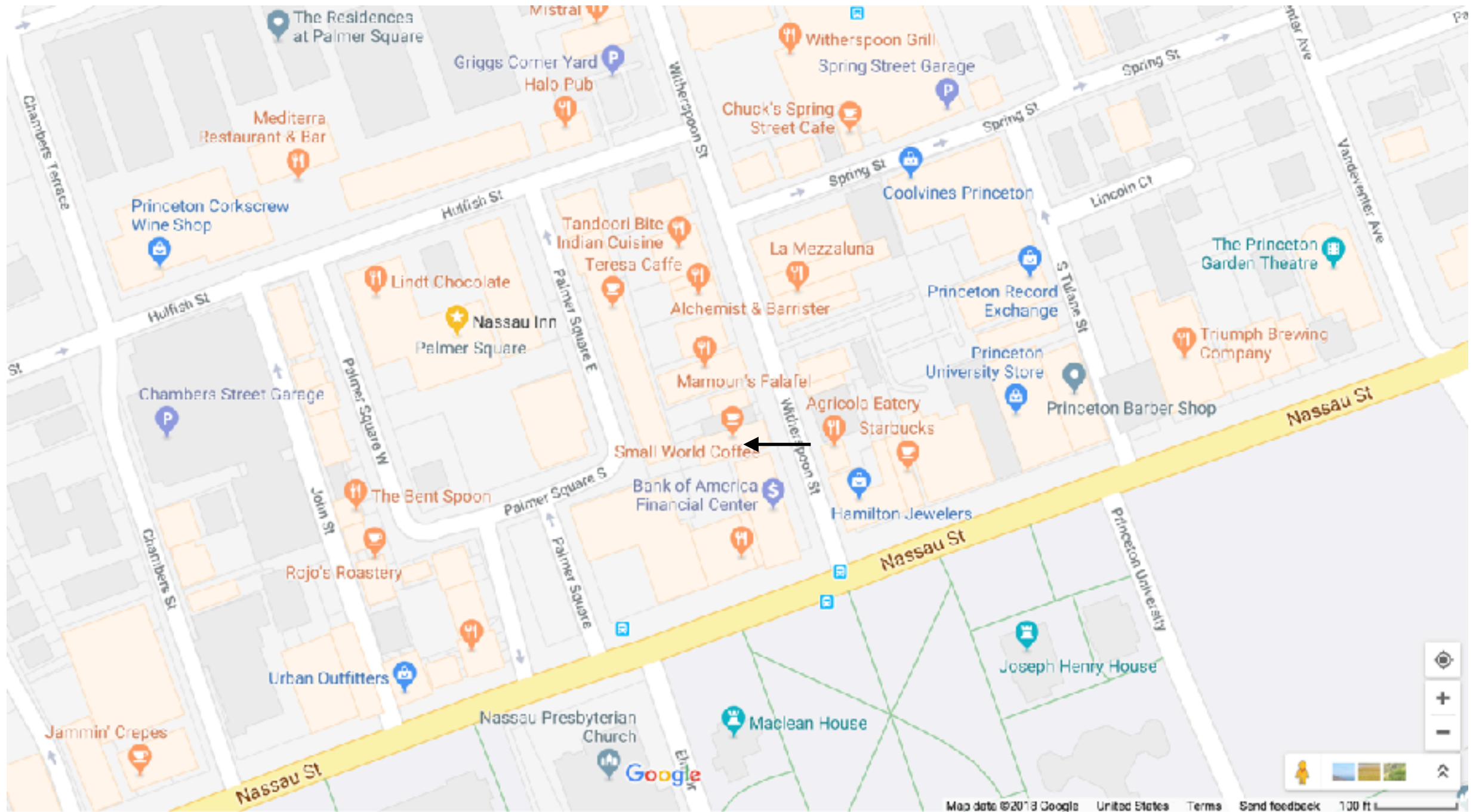


Triggering on New Physics at the HL-LHC Jan 15, 2018

We will be making a sign up list for Dinner on Tuesday



Downtown Area



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*small world coffee is cash only
- I hear Rojo's is also good



Right now we are at a unique opportunity:

- Many of the technologies and conditions for the CMS Phase 2 Trigger Upgrade and HL-LHC have been discussed and algorithms/triggering methodologies explored within the CMS collaboration
- **New Physics has not been discovered at the LHC (yet)**
 - ▶ Very very rare or well hidden!

How we can best leverage an upgraded trigger system:

Flexibility for new ideas

Developing (new or standard) algorithms that will trigger on new physics signatures

Data parking/scouting

Where to focus our efforts for the next round of development!

- **A final note:** While we have kept the workshop small this year, perhaps we can extend the invitation to other experiments in future iterations