

Welcome to Fermilab and the 13th annual Fermilab–CERN HCPSS!

13th annual
Fermilab–CERN Hadron Collider Physics Summer School
August 20–31, 2018 Fermilab

hcpss.fnal.gov/hcpss18



Jim Hirschauer and Estia Eichten



20 Aug 2018

Introductions

- Organizes:
 - Estia Eichten
 - Jim Hirschauer
 - Joy Pomillo
 - Melody Saperston
- Local Organizing Committee:
 - David Miller (University of Chicago)
 - Corrinne Mills (University of Illinois, Chicago and Fermilab)
 - Stefan Prestel (Fermilab)
 - Jimmy Proudfoot (Argonne National Laboratory)
 - Mayda Velasco (Northwestern University)

Summer School Experience

- We are fortunate to have a full line up of world-renowned lecturers.
 - Take advantage!
 - Engage them – ask questions during lectures, in discussion sessions, at coffee and social activities!
- Get to know your peers socially and professionally.
 - You will continue to see these people for decades!
 - Feel free to join our facebook group to connect:
<https://www.facebook.com/groups/hcpss2018>

Schedule and locations

- Full schedule is here :

<https://indico.fnal.gov/event/15893/other-view?view=standard>

- One page schedule is here:

<https://indico.fnal.gov/event/17113/material/3/0.pdf>

- All lectures except on Aug 28–29 will take place in this room, One West.
 - Lectures on Aug 28–29 will take place in Ramsey Auditorium.

One-page schedule

Mon Aug 20	Tues Aug 21	Wed Aug 22	Thurs Aug 23	Fri Aug 24	Sat Aug 25	Sun Aug 26	Mon Aug 27	Tues Aug 28	Wed Aug 29	Thurs Aug 30	Fri Aug 31
8:15 Bus to FNAL	8:15 Bus to FNAL	8:15 Bus to FNAL	8:15 Bus to FNAL	8:15 Bus to FNAL		8:15 Bus to FNAL	8:15 Bus to FNAL	8:15 Bus to FNAL	8:15 Bus to FNAL	8:15 Bus to FNAL	8:15 Bus to FNAL
9:00 Welcome Hirschauer	9:00 Announce ments	9:00 Announce ments	9:00 Announce ments	9:00 Announce ments	Hotel shuttle to train station	9:00 Announce ments	9:00 Announce ments	9:00 Announce ments	9:00 Announce ments	9:00 Announce ments	9:00 Announce ments
9:10 QCD Campbell	9:10 QCD Campbell	9:10 Higgs Th. Dawson	9:10 QCD Campbell	9:10 BSM Th. Fox	Free/ Chicago	9:10 BSM Th. Fox	9:10 BSM Exp. Campagnari	9:10 BSM Exp. Campagnari	9:10 Flavor Zupan	9:10 Accelerators Prebys	9:10 Accelerators Prebys
10:10 Coffee	10:10 Coffee	10:10 Coffee	10:10 Coffee	10:10 Coffee	Free/ Chicago	10:10 Prec Meas. Berryhill	10:10 Coffee	10:10 Coffee	10:10 Coffee	10:10 Coffee	10:10 Coffee
10:40 Higgs Th. Dawson	10:40 Higgs Th. Dawson	10:40 Neutrinos Schukraft	10:40 BSM Th. Fox	10:40 Prec Meas. Berryhill	Free/ Chicago	11:10 Coffee	10:40 Prec Meas. Berryhill	10:40 Higgs Exp. Kado	10:40 Mach Learn Williams	10:40 Mach Learn Williams	10:40 Adv Reco Tran
11:40 Lunch	11:40 Lunch / Women in HEP	11:40 Lunch	11:40 Lunch	11:40 Lunch	Free/ Chicago	11:40 Trig/DAQ Tompkins	11:40 Lunch	11:40 Lunch	11:40 Lunch	11:40 Lunch	11:40 Lunch
13:00 Statistics Cousins	13:00 Statistics Cousins	13:00 Tours	13:00 Heavy Ion Sickles	13:00 Heavy Ion Sickles	Free/ Chicago	13:00 Bus to hotel	13:00 Higgs Exp. Kado	13:00 Flavor Zupan	13:00 ML Tutorial	13:00 Adv Reco Tran	13:00 Closeout Hirschauer
14:00 Si Detectrs Mills	14:00 Si Detectrs Mills	Tours	14:00 Calorimtry Wigmans	14:00 Calorimtry Wigmans	Free/ Chicago	Free	14:00 Trig/DAQ Tompkins	14:00 Quant. Sens. Bowring	ML Tutorial	14:00 Fast Timing Seiden	13:30 Bus to hotel
15:00 Coffee	15:00 Coffee	Tours	15:00 Coffee	15:00 Coffee	Free/ Chicago	Free	15:00 Coffee	15:00 Coffee	ML Tutorial	15:00 Coffee	
15:30 Discussion	15:30 Discussion	Tours	15:30 Discussion	15:30 ATLAS tH W&C Schwarz	Free/ Chicago	Free	15:30 Discussion	15:30 Discussion	16:00 Colloquium Quant Topics	15:30 Discussion	
17:00 Bus to hotel	17:30 Bus to hotel	18:00 Bus to hotel	17:00 Bus to hotel	17:30 Bus to hotel	Hotel shuttle	Hotel shuttle	17:30 Bus to hotel	17:30 Bus to hotel	17:30 Bus to hotel	17:00 Bus to Two Bros	
17:30 Reception at hotel			17:30 Pizza Night at hotel							17:30 Banquet at Two Bros	

Discussion sessions

- On Mondays, Tuesdays, and Thursdays, we have discussion sessions from 15:30 to about 16:30.
- **Lecturers** will break out into different rooms with **smaller groups for discussion, detailed questions, tangential questions**, etc.
- Locations will be announced as the week progresses, but will be in
 - One West : This room
 - Sunrise : WH 11 NE = Wilson Hall, 11th floor, North East corner
 - West Wing : WH 10 NW
 - Hornet's Nest : WH 8 cross-over
- **Today's rooms** (tentative):
 - Bob Cousins – Statistics : WH 11 NE
 - Sally Dawson – Higgs and Electroweak theory : WH 10 NW
 - Corrinne Mills – Silicon Detectors : One West

Special lectures

- Wed Aug 22 : **Neutrino Physics** – Anne Schukraft (Fermilab)
- Fri Aug 24 : **Fermilab "Wine & Cheese" seminar** – Tom Schwarz (Michigan)
 - ATLAS search for ttH
- Tues Aug 28 : **Quantum Sensors** – Daniel Bowring (Fermilab)
- Thurs Aug 30 : **Precision timing detectors** – Abe Seiden (UCSC)

Transportation

- Buses will pick you up from Embassy Suites every day at **8:15am**.
- Buses will take you from Wilson Hall to hotel at end of each day.
 - **Times vary, so check the schedule - earliest is 5pm.**
- **Hotel has shuttle service** for transportation to
 - Fermilab (in case of emergency)
 - Naperville locations : restaurants, parks, etc
 - Metra Station : where you can catch train to Chicago travel

Meals and Coffee

- **Breakfast** at hotel before bus.
- Purchase **lunch** in Fermilab cafeteria.
 - We have lectures Sunday AM, but cafeteria is closed, so find lunch in Naperville.
- **Coffee breaks** with snacks and other beverages provided in AM and PM.
- **Dinner** on your own in and around Naperville – unless social event.
 - Good restaurants near hotel : recommend Naf Naf Grill.
- The hotel will host a "**Manager's Happy Hour**" **every evening** with snacks and drinks.

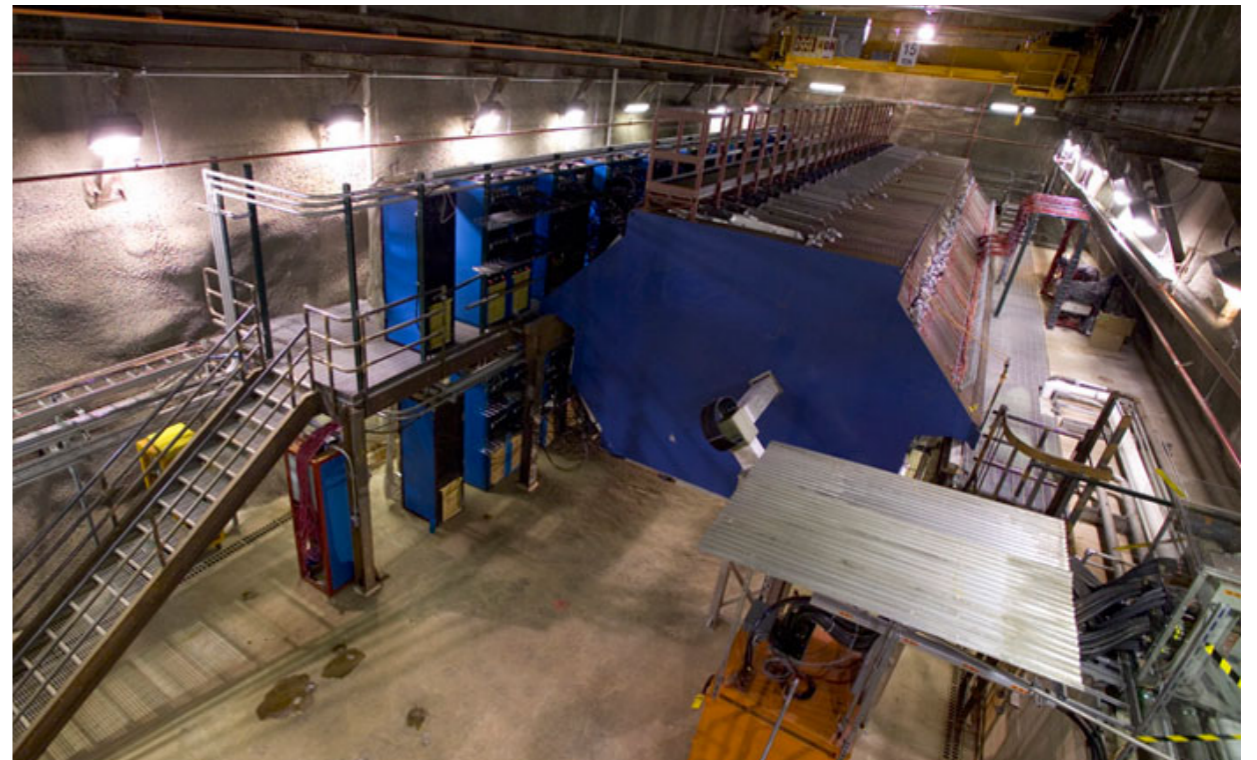
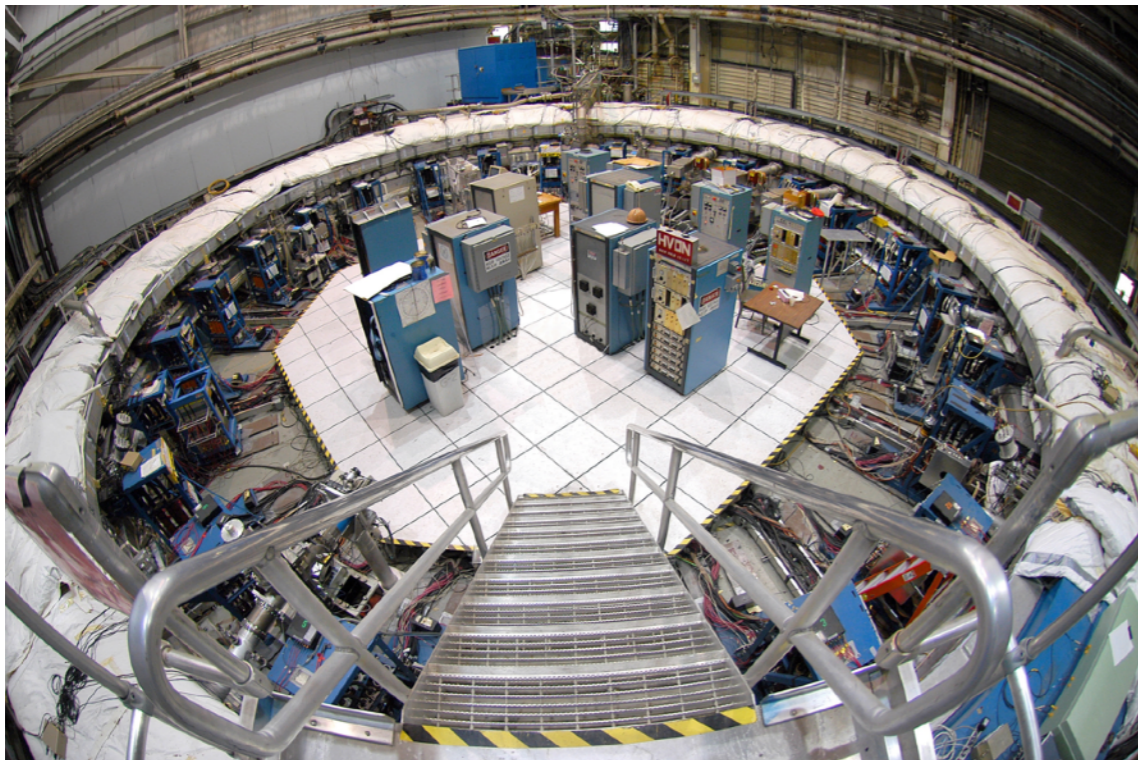
Social events

- **Tonight : Reception** at hotel at 17:30
 - Buses leave at 17:00
- Thursday, Aug 23: **Pizza night** at hotel.
- Friday, Aug 30 : **Banquet at Two Brothers Roundhouse** in Aurora



Tours

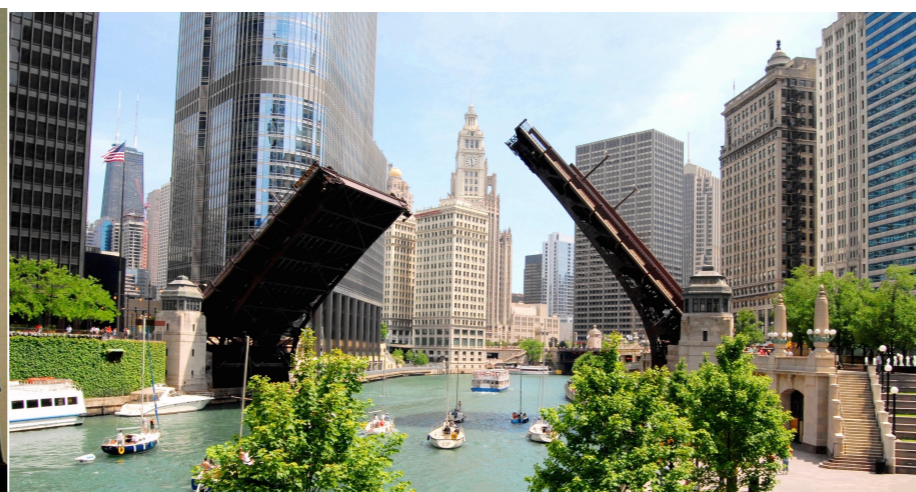
- We will tour Fermilab experimental sites at on the afternoon of **Wednesday, Aug 22**.
- Your tour group ticket should be in your packet.



Free Time

- Saturday, Aug 25 – all day
 - Recommend taking hotel shuttle to train station and train into Chicago
 - Millennium Park & Museum Campus is 1-mile walk from Union Station
- Sunday, Aug 26 – afternoon
 - Recommend taking hotel shuttle into Naperville for Riverwalk, Naper settlement, Centennial Beach, and other sites:

https://www.tripadvisor.com/Attractions-g36422-Activities-Naperville_Illinois.html



**We hope you have a fun and
productive time here at Fermilab!**