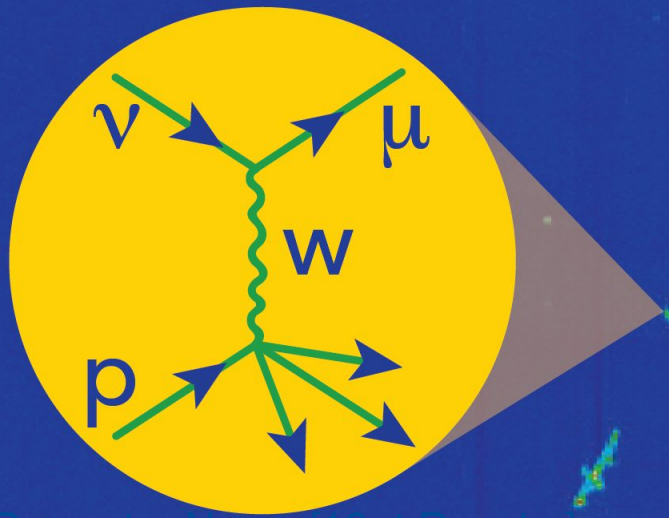
Welcome to INSS 2019!

12th International
Neutrino Summer School
Aug 5 – Aug 16, 2019

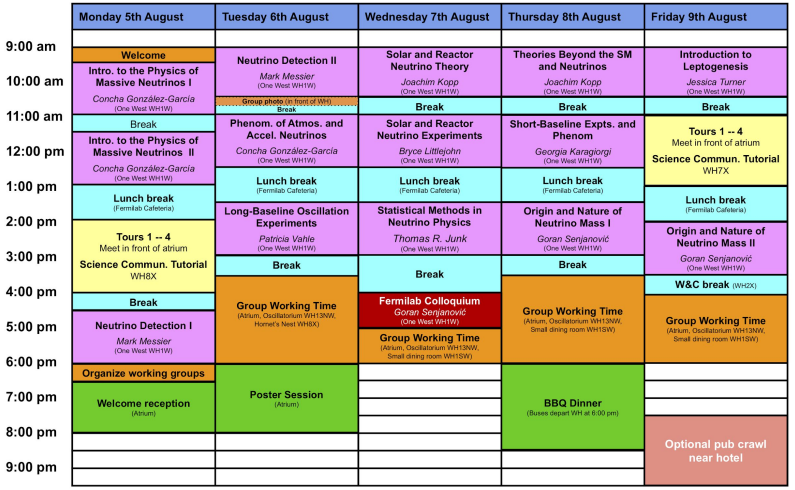


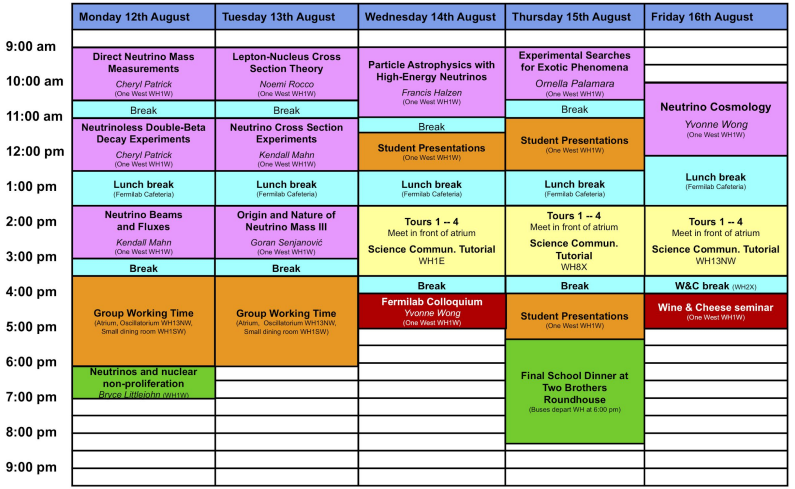
Presenter Name [16pt Regular]
Meeting Title
Day Month Year

Fermilab

Program / school overview

School overview



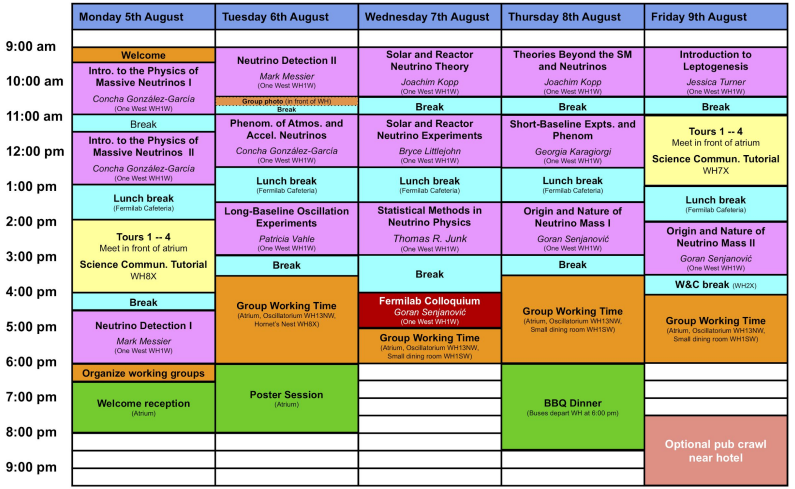


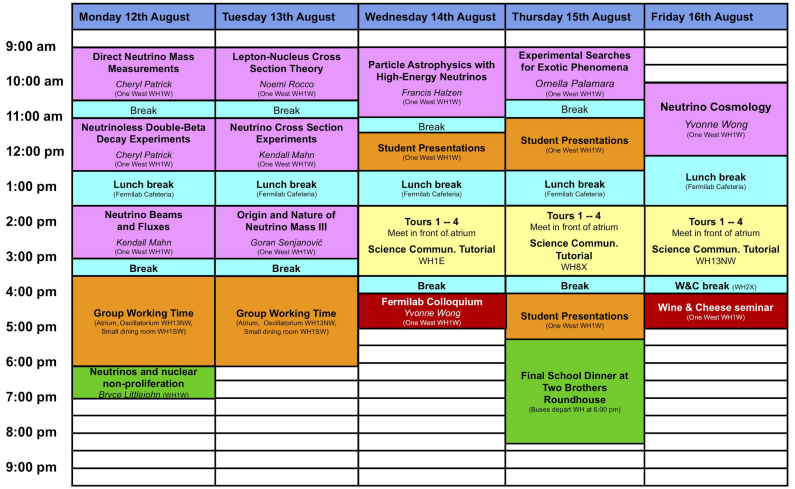
Detailed schedule / some presentation materials in the indico “Timetable” pages

Schedule-at-a-glance linked from indico page

School overview

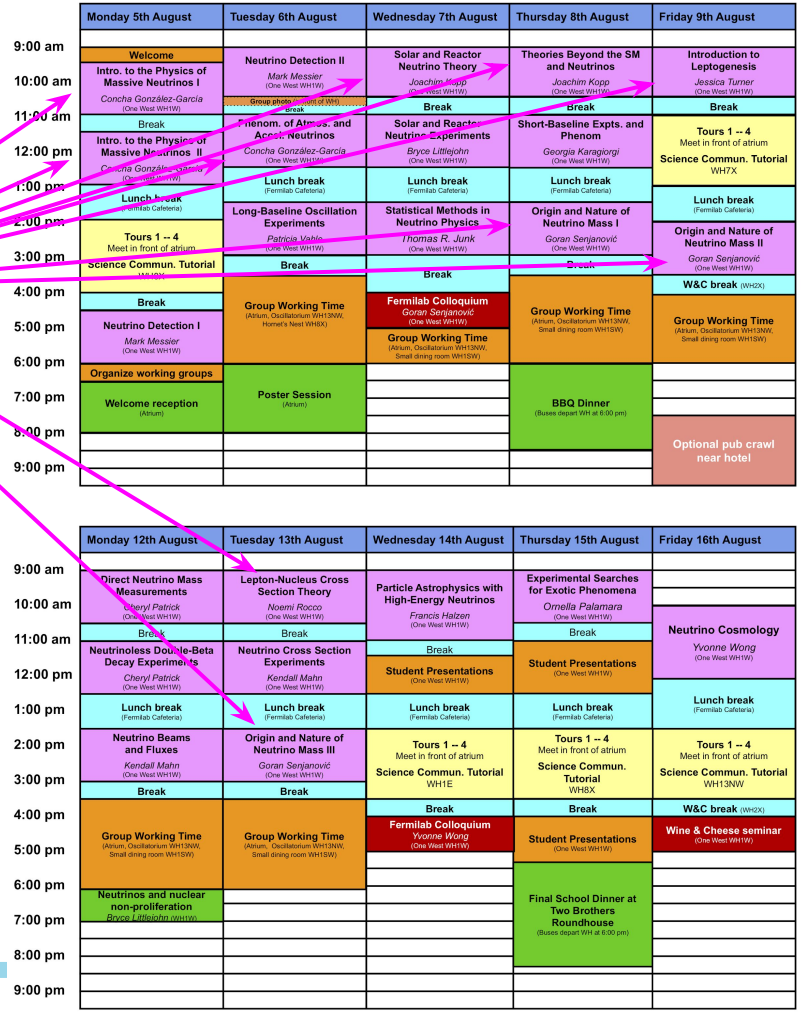
- Total of 23 lecture sessions on topics across neutrino physics





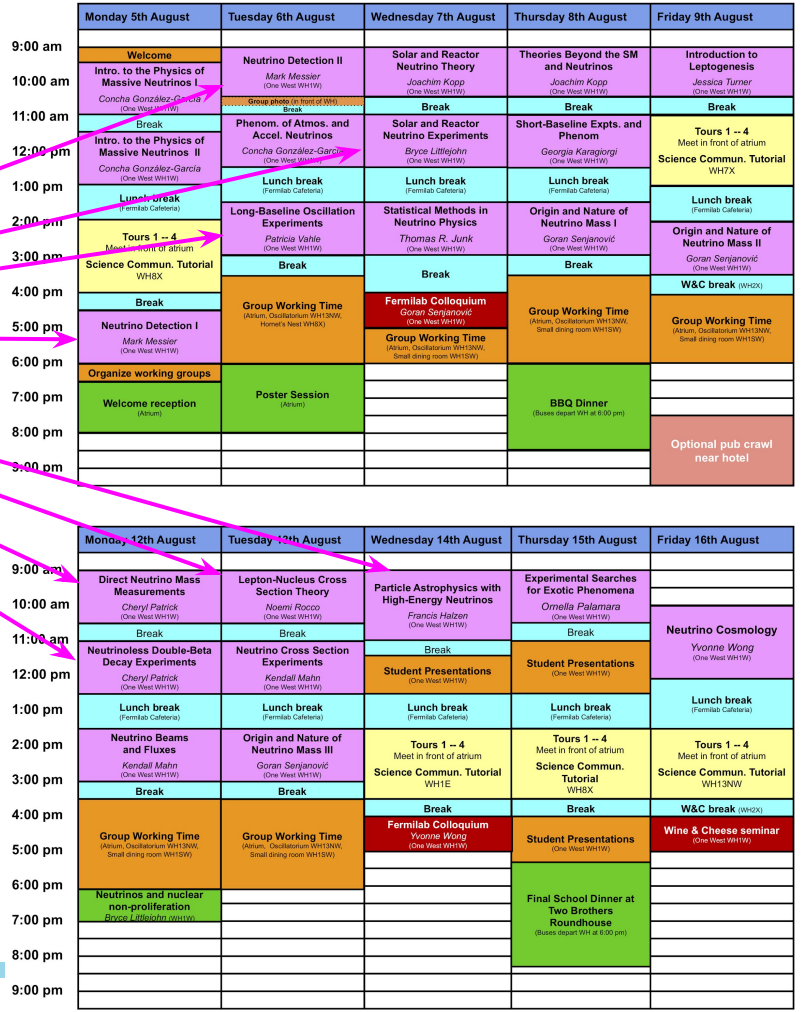
School overview

- Total of 23 lecture sessions on topics across neutrino physics
  - 11 theory and phenomenology



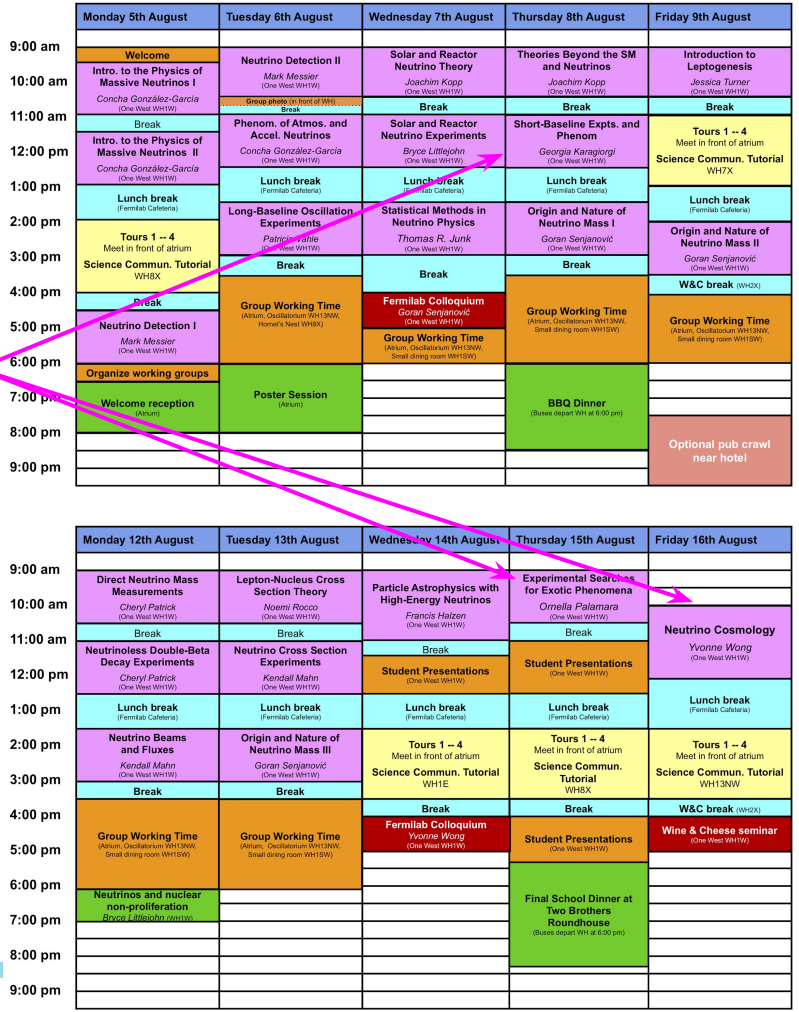
School overview

- Total of 23 lecture sessions on topics across neutrino physics
  - 11 theory and phenomenology
  - 8 experimental



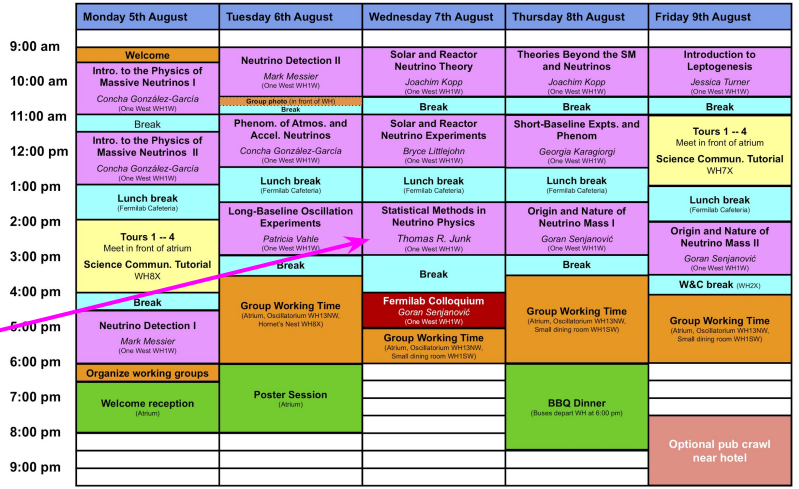
School overview

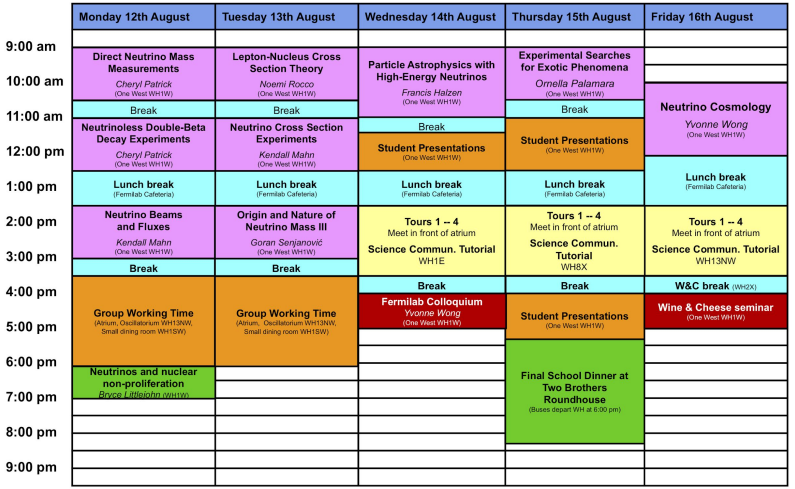
- Total of 23 lecture sessions on topics across neutrino physics
  - 11 theory and phenomenology
  - 8 experimental
  - 3 combined theory / phenom / experiment



School overview

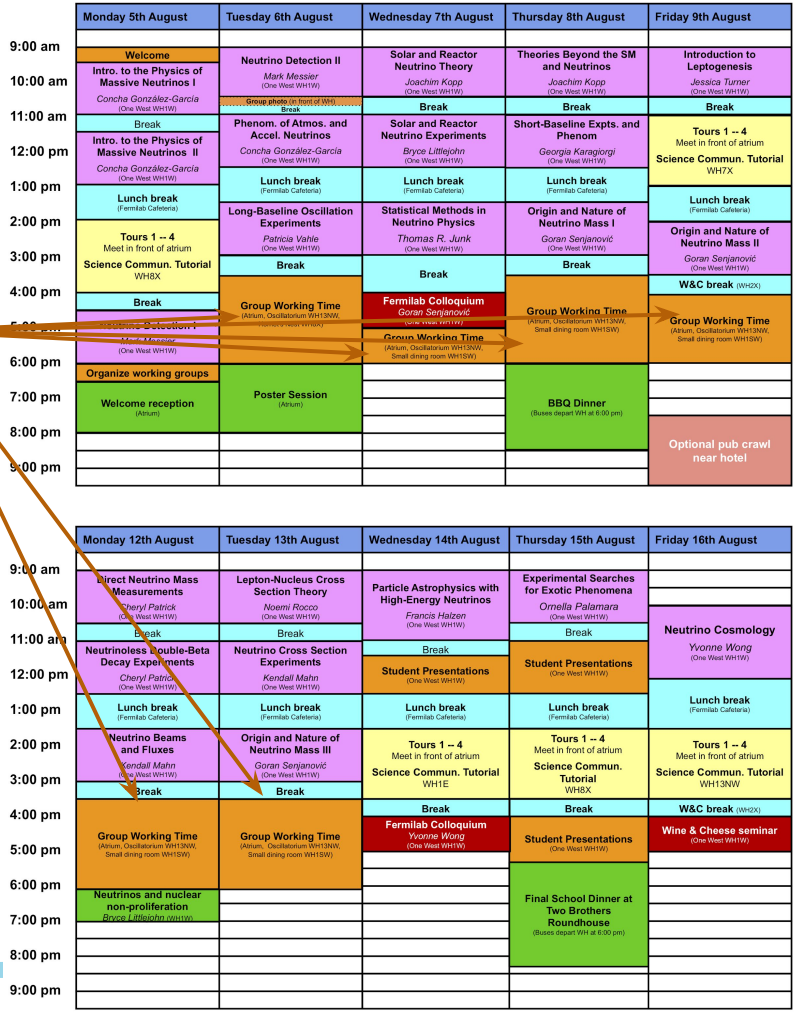
- Total of 23 lecture sessions on topics across neutrino physics
  - 11 theory and phenomenology
  - 8 experimental
  - 3 combined theory / phenom / experiment
  - 1 statistical methods





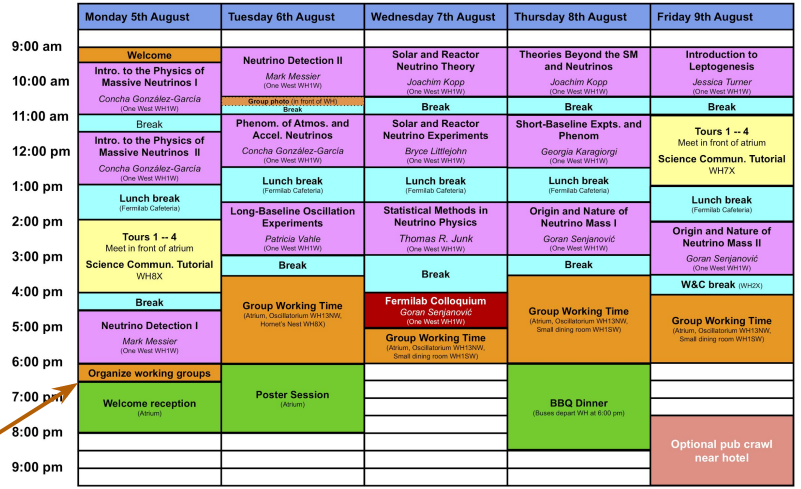
School overview

- Total of 23 lecture sessions on topics across neutrino physics
- 10.5 hours of scheduled working group time
  - Students assigned to groups of ~5
  - Work on open-ended problems

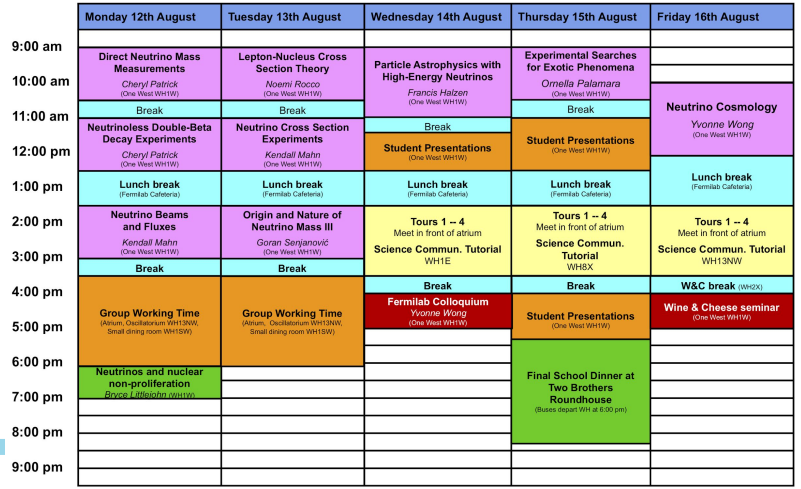


School overview

- Total of 23 lecture sessions on topics across neutrino physics
- 10.5 hours of scheduled working group time
  - Students assigned to groups of ~5
  - Work on open-ended problems
    - Will organize work at 6:00 pm today
    - Problems, groups posted to indico



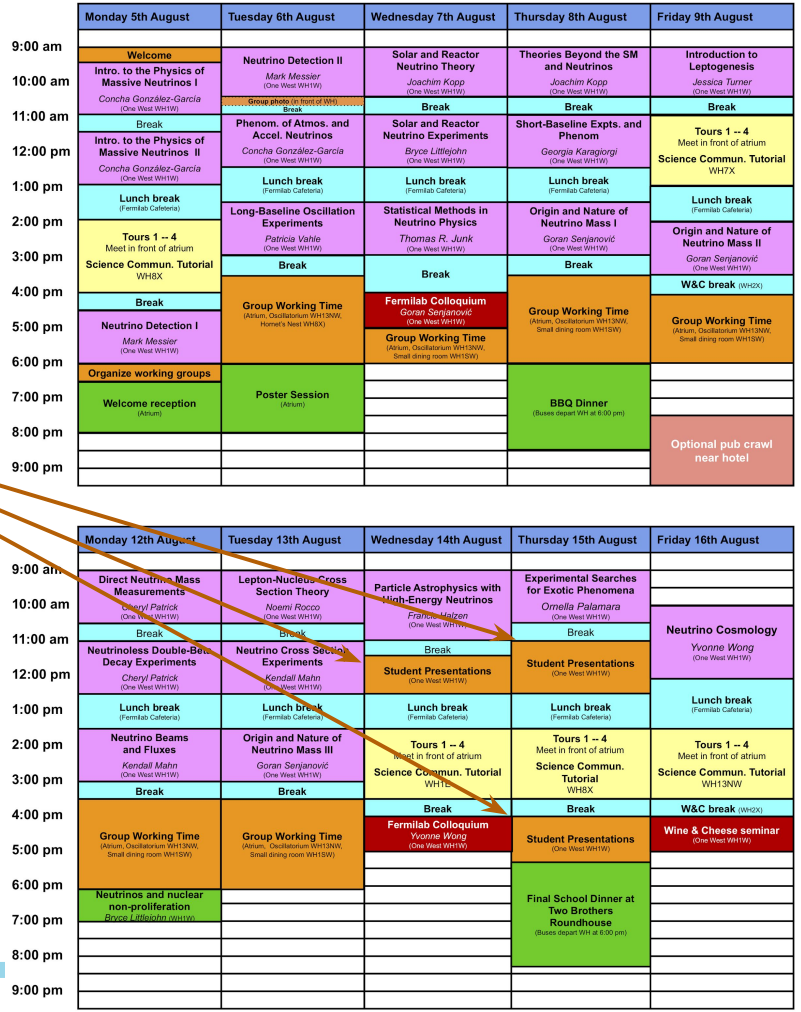
Week 1



Week 2

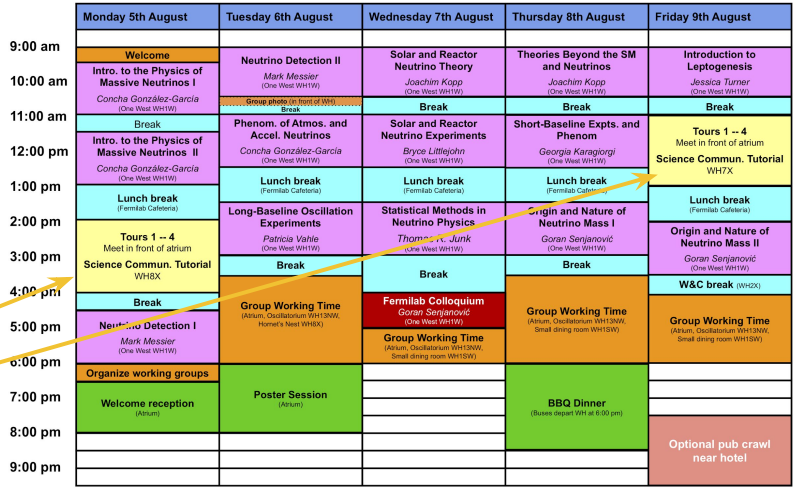
School overview

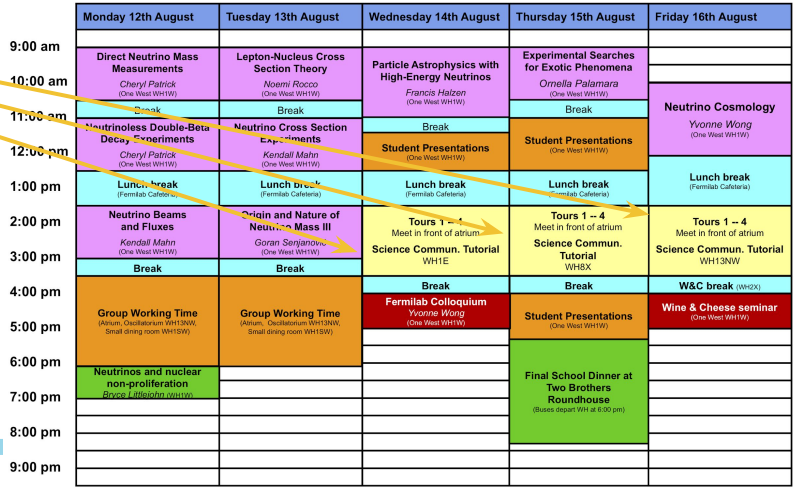
- Total of 23 lecture sessions on topics across neutrino physics
- 10.5 hours of scheduled working group time
- Student presentations of group work
  - APS-style, 8+2 minutes
  - Prizes for best presentations



School overview

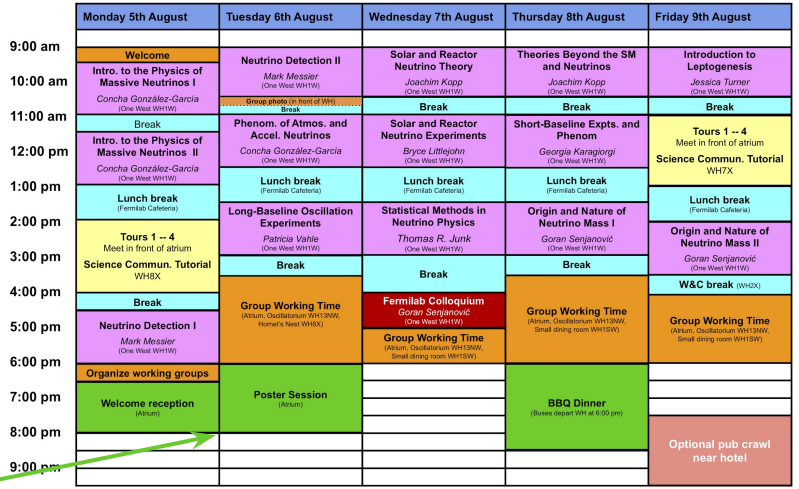
- Total of 23 lecture sessions on topics across neutrino physics
- 10.5 hours of scheduled working group time
- Student presentations of group work
- Tours and tutorials
  - Split into groups of ~18
  - 4 groups visit facilities
    - Muon g-2 experiment
    - DØ detector
    - SRF + SC magnet facilities
    - NOvA / MINOS / MINERvA underground
  - 1 group attends tutorial
    - Science communication

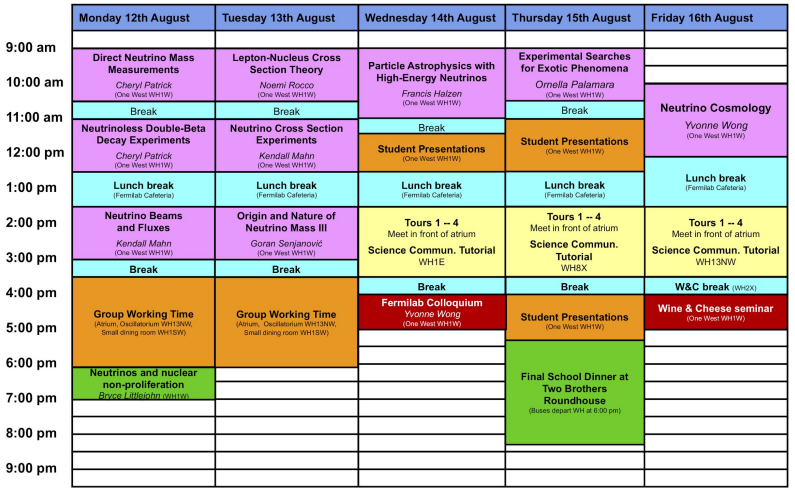




School overview

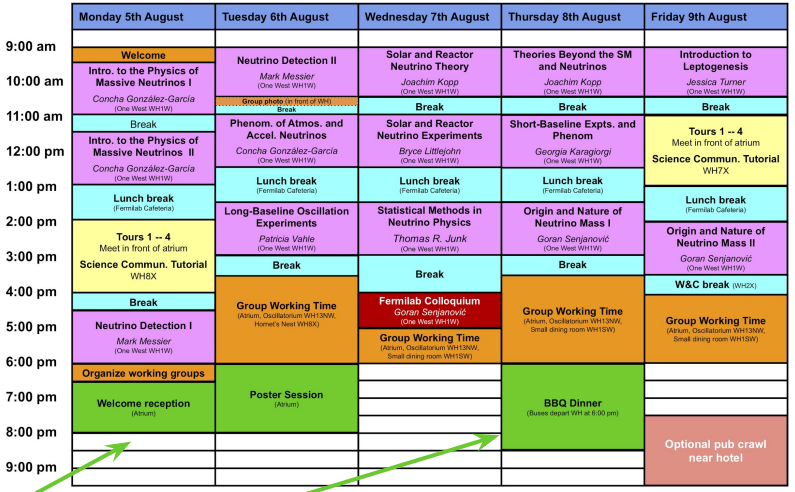
- Total of 23 lecture sessions on topics across neutrino physics
- 10.5 hours of scheduled working group time
- Student presentations of group work
- Tours and tutorials
- Poster session
  - Current student research topics
  - Prizes for best (as determined by judges)
  - Snacks to be served
  - Note:
    - Set-up: after 12:30 pm on Tues, Aug 6
    - Take-down: by 1:30 pm on Wed, Aug 7





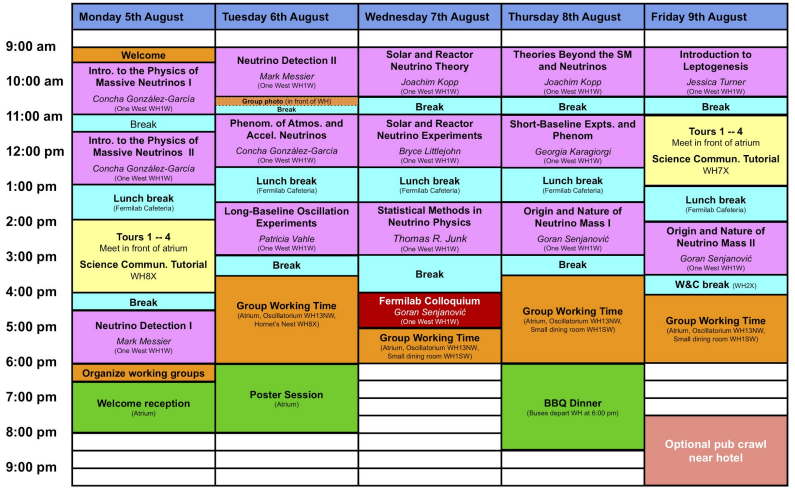
School overview

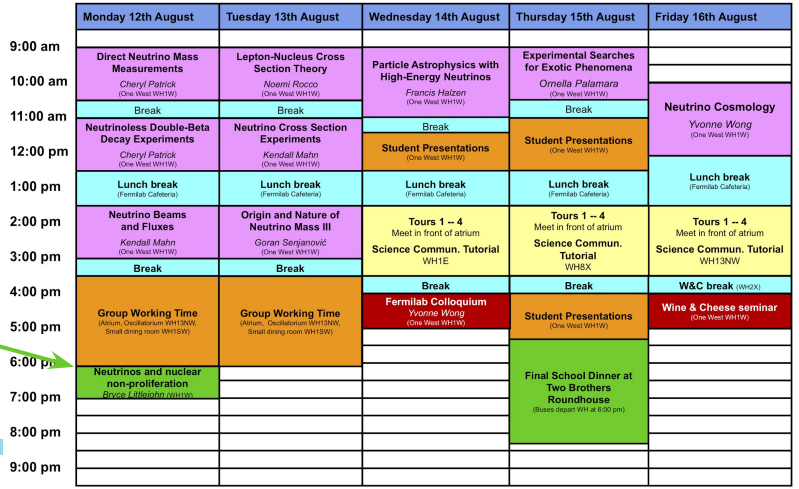
- Total of 23 lecture sessions on topics across neutrino physics
- 10.5 hours of scheduled working group time
- Student presentations of group work
- Tours and tutorials
- Poster session
- Three scheduled social events
  - Welcome reception today 6:30 to 8:00 pm
  - BBQ dinner
  - Final school dinner @ Two Brothers Roundhouse



School overview

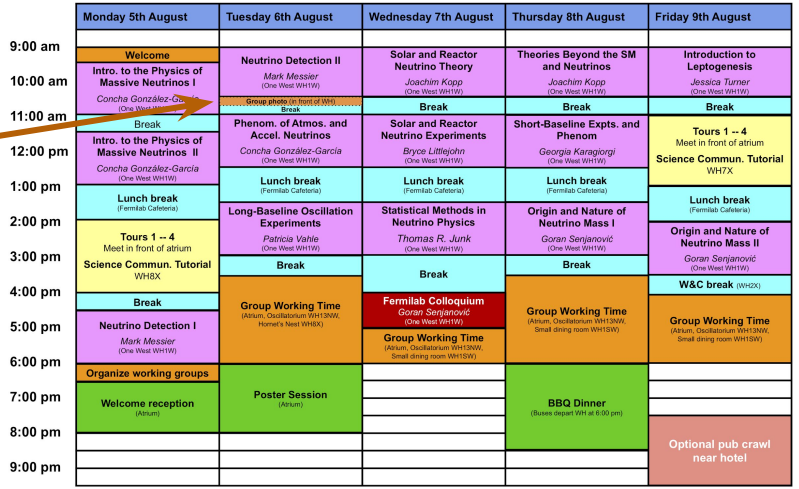
- Total of 23 lecture sessions on topics across neutrino physics
- 10.5 hours of scheduled working group time
- Student presentations of group work
- Tours and tutorials
- Poster session
- Three scheduled social events
- Special interest session
  - Neutrinos and non-proliferation

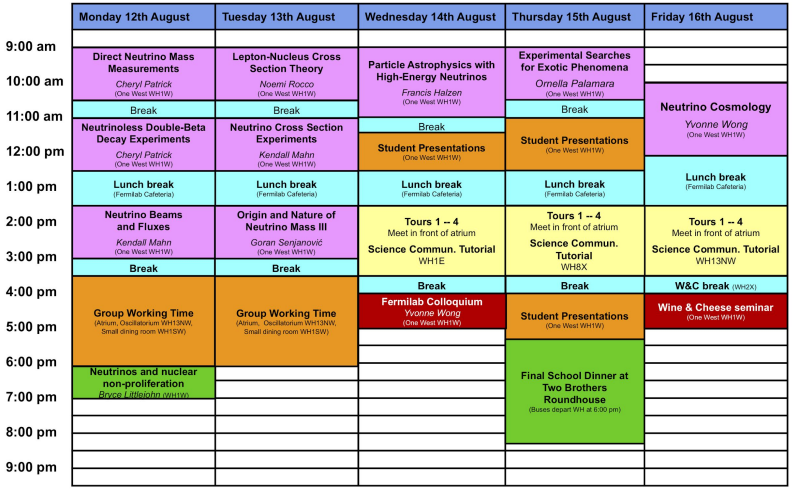




School overview

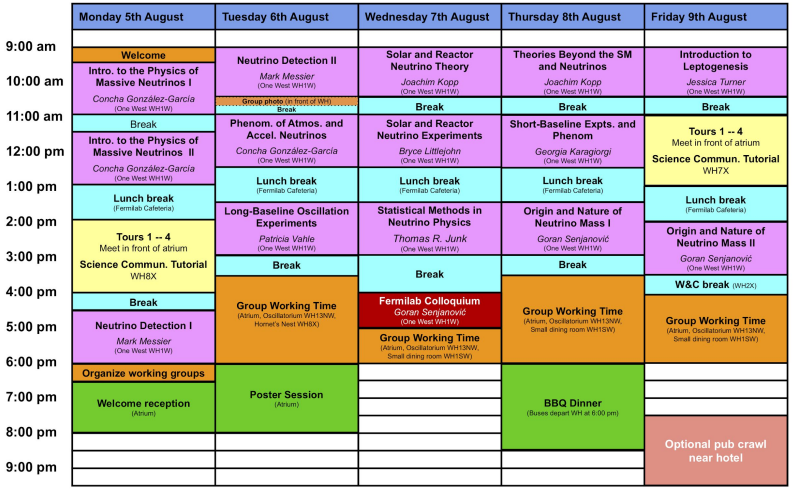
- INSS2019 group photo
  - 10:30 am on Tues, Aug 6
    - Immediately after morning lecture
  - Meet in front of atrium

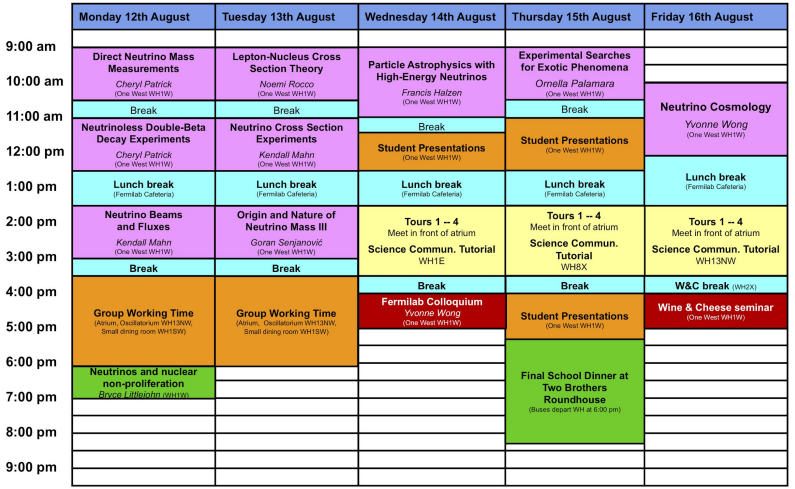




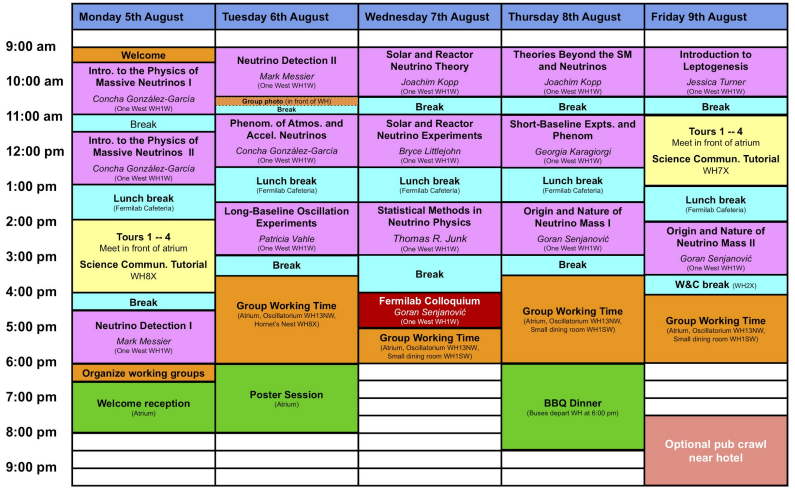
School overview

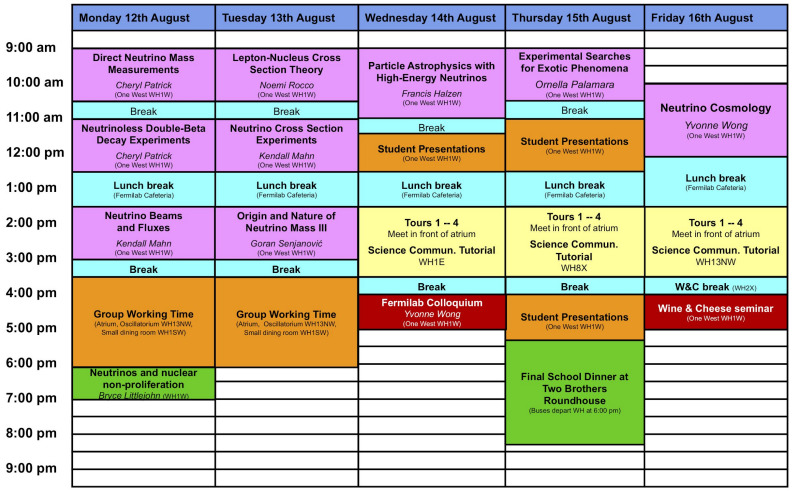
- INSS2019 group photo
  - 10:30 am on Tues, Aug 6
    - Immediately after morning lecture
  - Meet in front of atrium
- Breaks
  - 30 minutes in the morning and afternoon
  - 60 minutes for lunch





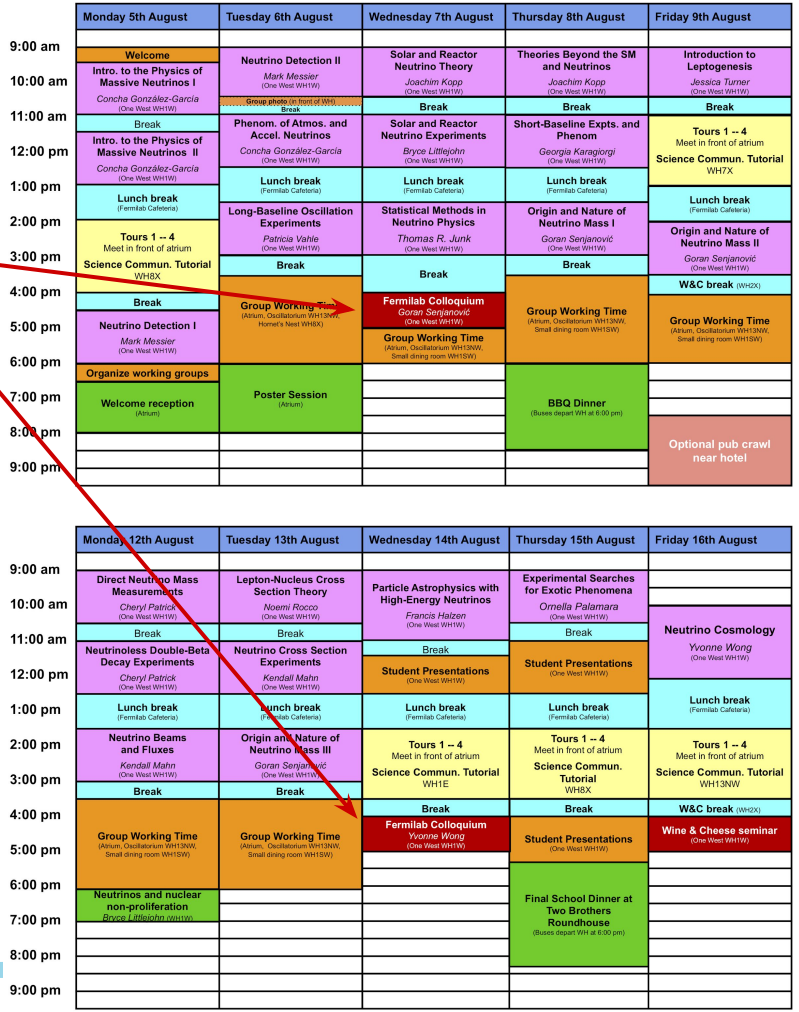
Other activities





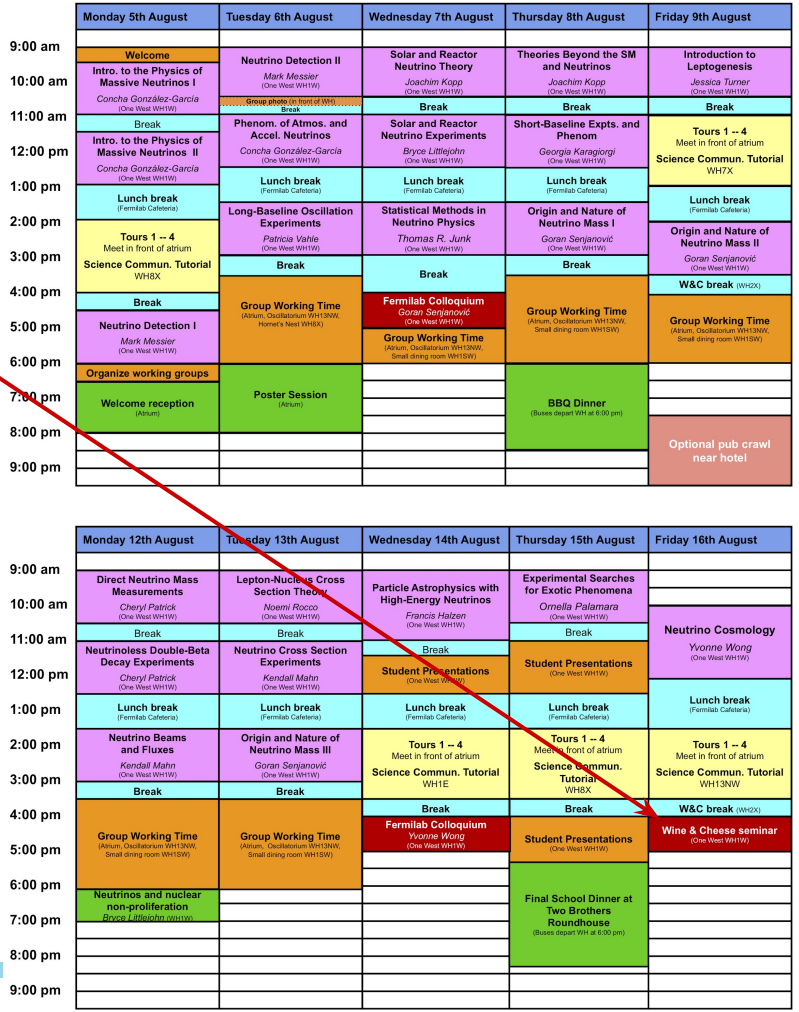
Other activities

- Fermilab Colloquium
  - Presented by INSS2019 lecturers
    - Goran Senjanović
    - Yvonne Wong
  - Neutrino-related topics aimed a the broader Fermilab community



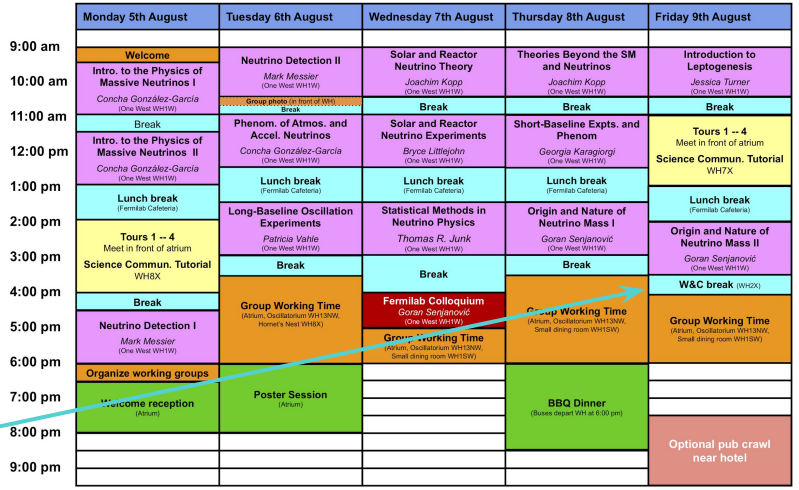
Other activities

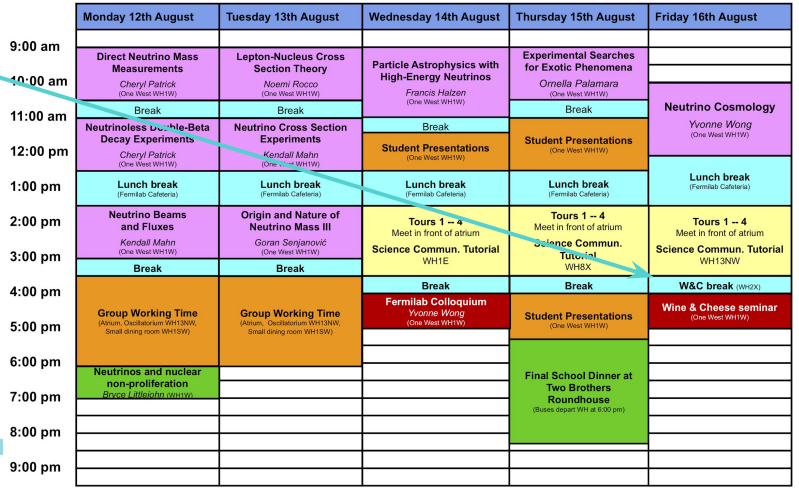
- Fermilab Colloquium
- Joint Experimental-Theoretical Seminar
  - Friday at 4:00 pm in WH1W
    - (Working group time scheduled over Aug 9 seminar)



Other activities

- Fermilab Colloquium
- Joint Experimental-Theoretical Physics Seminar
  - Friday at 4:00 pm in WH1W
    - (Working group time scheduled over Aug 9 seminar)
- Wine and cheese break
  - Served at 3:30 pm on Friday prior to JETP
  - WH2X (up the stairs on the south end of the atrium)

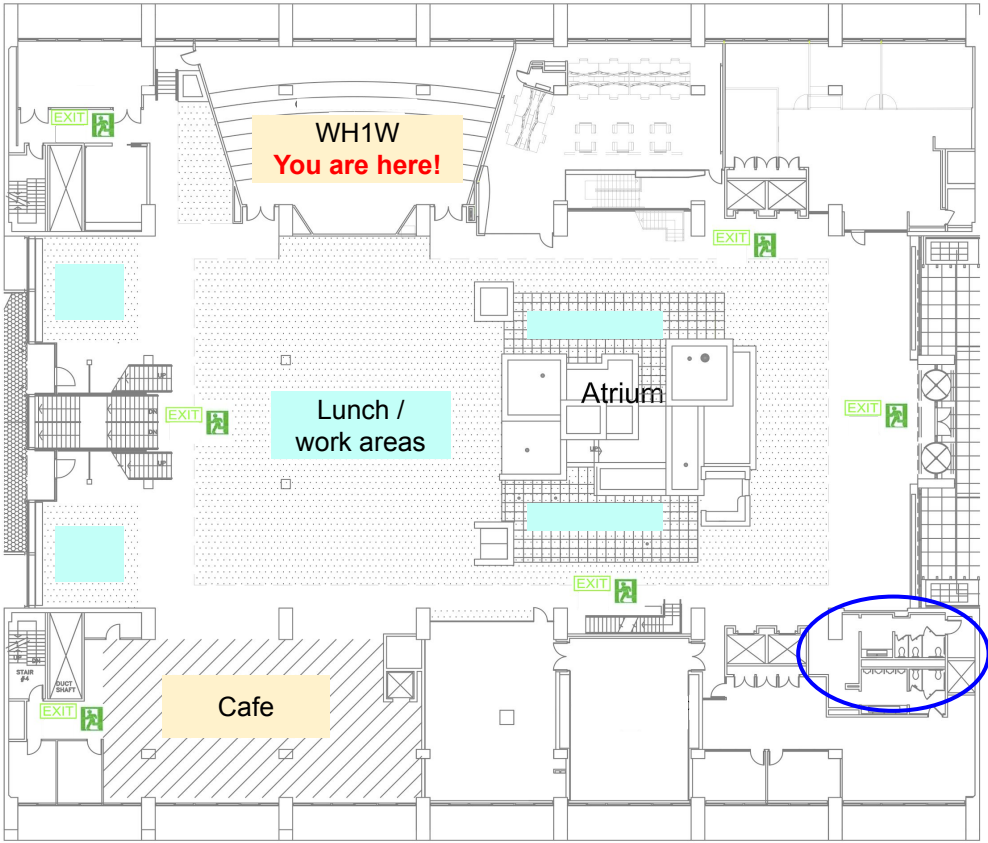




Logistics and other information

Orienting

Wilson Hall Atrium Level Floor Plan



"North"

"Front" side of Wilson Hall

"Horseshoe" is straight ahead

Restrooms / toilets

Note: Rooms in Wilson Hall (WH) are designated according to the side of the building (E/W/X) and the floor. E.g., WH2X

Fermilab

Orienting

Wilson Hall

Users Center,
Frontier Pub,
Kuhn Barn

"Site North"

Fermilab

Buses

EVENT DATE	AM PICK UP at Courtyard*	PM PICK UP at Fermilab Horseshoe**	PM PICK UP at Two Brothers Roundhouse
August 5	8:15 a.m.	8:00 p.m.	
August 6	8:15 a.m.	8:00 p.m.	
August 7	8:15 a.m.	**6:00 p.m.**	
August 8	8:15 a.m.	**6:00 p.m.**	
August 9	8:15 a.m.	**6:00 p.m.**	
August 12	8:15 a.m.	**7:00 p.m.**	
August 13	8:15 a.m.	**6:00 p.m.**	
August 14	8:15 a.m.	**5:00 p.m.**	
August 15	8:15 a.m.	**5:30 p.m. *** **	8:00 p.m.
August 16	**9:15 a.m.**		

Posted on indico page

Fermilab ID badging process

Students should pick up Fermilab ID badges from the User's Office

- located on the Mezzanine (between Ground Floor and Atrium levels on north end)

Proceed in groups during breaks and lunch

- One group during morning and afternoon breaks
- Two groups during lunch separated by 30 minutes

List is posted under Logistics and On-the-ground Information page on INSS2019 indico site

Group 1	Group 2	Group 3	Group 4
Aug 5, 11:00 am	Aug 5, 1:00 pm	Aug 5, 1:30 pm	Aug 5, 4:00 pm
ANDRADE, Diego	BROOKS, Thomas	FILKINS, Amy	LACKEY, Teresa
ASCENCIO, Marvin V.	CABABIE, Mariano Ruben	GE, Guanqun	LAZAR, Jeffrey
ASQUITH, Lily	CALCUTT, Jacob	GELLI, Bruno	LAZU, Ryan
ATKIN, Edward	CARO TERRAZAS, Ivan	GILLIGAN, Sean	LEE, DongHa
BABICZ, Marta	CHARDONNET, Etienne	GOODWIN, Owen	LEONARD, Kayla
BALASUBRAMANIAN, Supraja	COFFANI, Alice	GROH, Micah	LOZANO SÁNCHEZ, Adrian
BARROW, Joshua	CONTRERAS, Taylor	HALL, Anna	MACHADO, Eric
BASHYAL, Amit	DALAGER, Olivia	HENRY , Sarah	MARTINEZ CASALES, Maria
BASQUE, Vincent	DANIELSON, Daine	HERRERO-GÓMEZ, Pablo	MARTIN, Joshua
BENEVIDES RODRIGUES, Ohana	DE ICAZA ASTIZ, Iker	HOEFKEN, Jaime	MASON, Katie
BODUR, Baran	DOYLE, Derek	JAKKAPU, Mahesh	MILLER, Katrina
BRIANNE, Eldwan	DUEÑAS, David	JWA, Yeon-jae	MUELLER, Justin

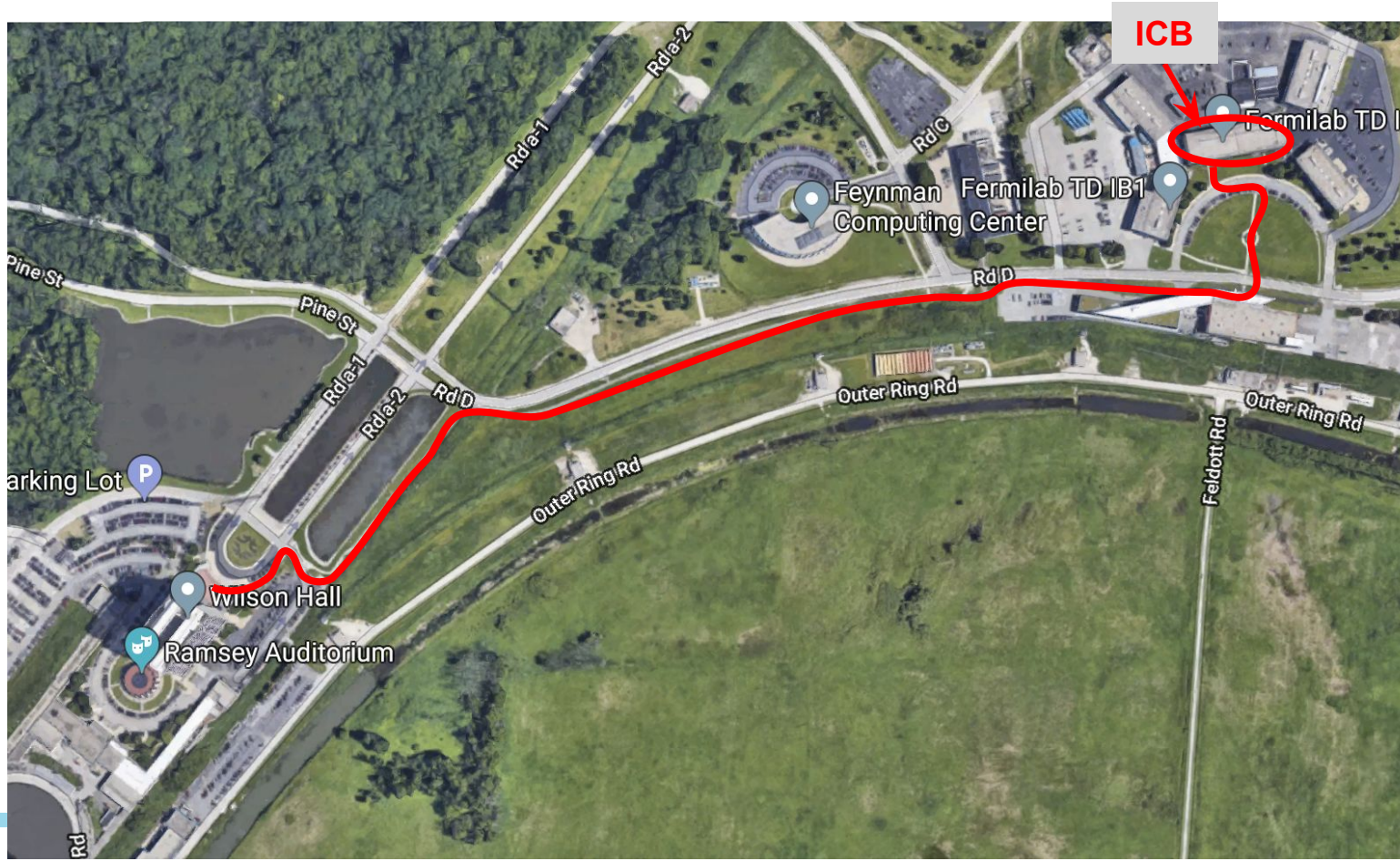
Group 5	Group 6	Group . 7	Group 8
Aug 6, 10:45 am	Aug 6, 12:30 pm	Aug 6, 1:00 pm	Aug 6, 3:00 pm
MUKHOPADHYAY, Mainak	RAHAT, Moinul Hossain	SHARMA, Vivek	VANN, Jared
MULDER, Kevin	RICE, Logan	SMITH, Adryanna	WANG, Yue
MU, Wei	RIGAN, Michal	SOLDIN, Philipp	WESTER, Thomas
PAL, Kuntal	RODRIGUES ROSSI, Rafaela	SOUZA, Henrique	WOOD, Kevin
PARKER, William	ROSAURO ALCARAZ, Salvador	STOCKER, Francesca	WU, Wanwei
PATEL, Sameer	SAFA, Ibrahim	SUTTON, Kathryn	YATES, Lauren
PIPLANI, Nishtha	SANCHEZ FALERO, Sebastian	SWEENEY, Cathal	ZHANG, Kairui
PORTO SILVA, Yago Philippe	SARASTY, Carlos	SWORD-FEHLBERG, Samantha	ZHANG, Xining
PRAMANICK, Soumita	SAWY, Fatma Helal	SZTUC, Artur	ZHOU, Bei
PRINCE, Sebastien	SHAFAQ, Sheeba	USÓN ANDRÉS, Alberto	
QUEIROGA BAZETTO, Maria Cecilia			
QUIRION, Kevin			

Tour and tutorial notes

Important information for those participating in tours

- Tour group assignments can be found on the INSS2019 indico site
  - Please check that to see which tour / tutorial you are scheduled to attend
- **All tour participants must wear closed-toe, low-heeled shoes**
- DØ Detector and NOvA / MINOS / MINERvA Underground tours
  - Shuttles will pick up in front of Wilson Hall
  - A few students may need alternative transportation. Let us know if you have a car
- SRF and SC magnet facilities, and Muon g-2 Experiment tours
  - Will walk from WH to the tour sites
  - Please let us know if a 10 to 15 minute walk outside will be a problem
- Tutorial attendees: check the schedule for the room assignment

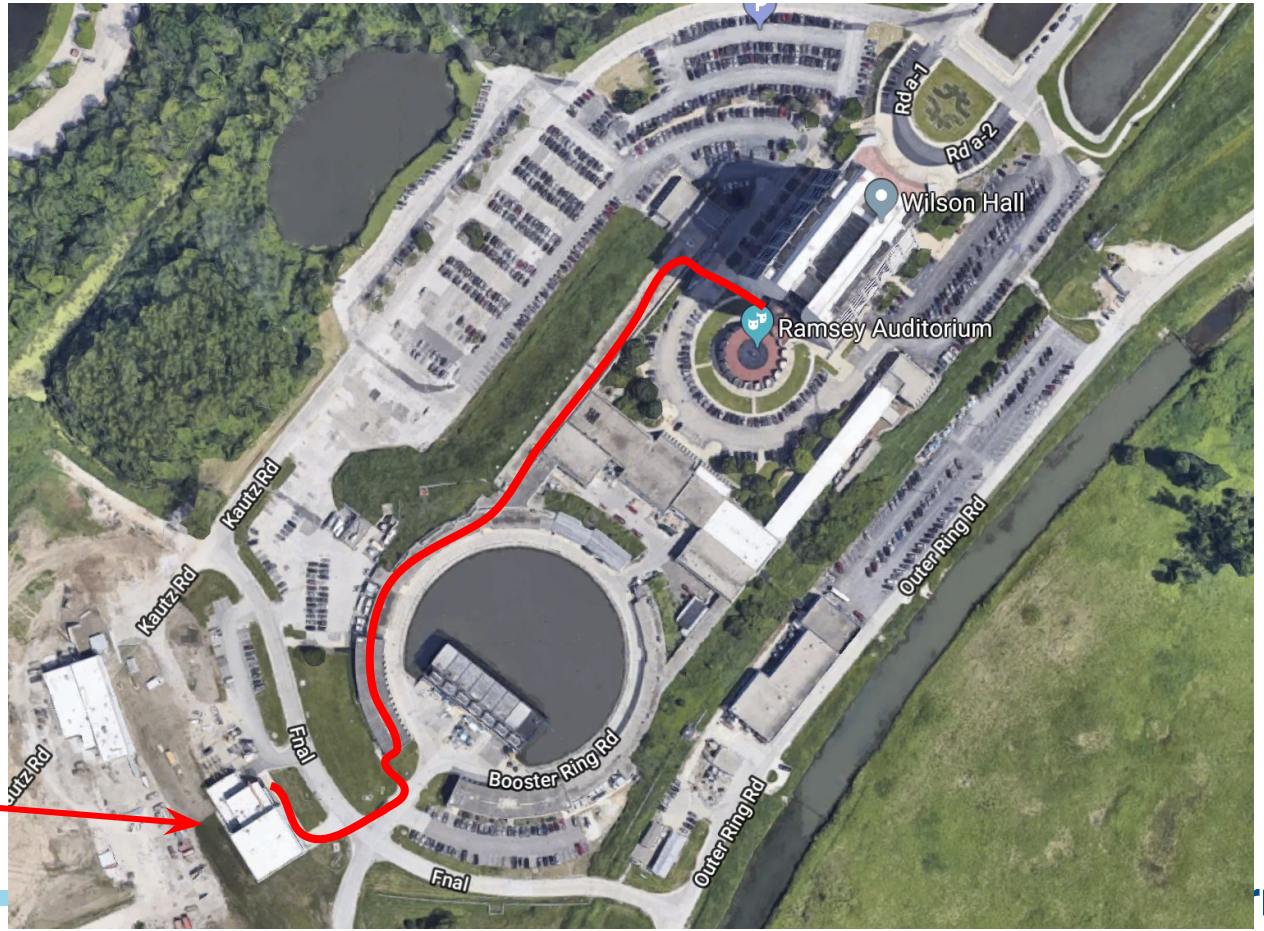
Walking route to SRF and SC Magnet Facilities tour site



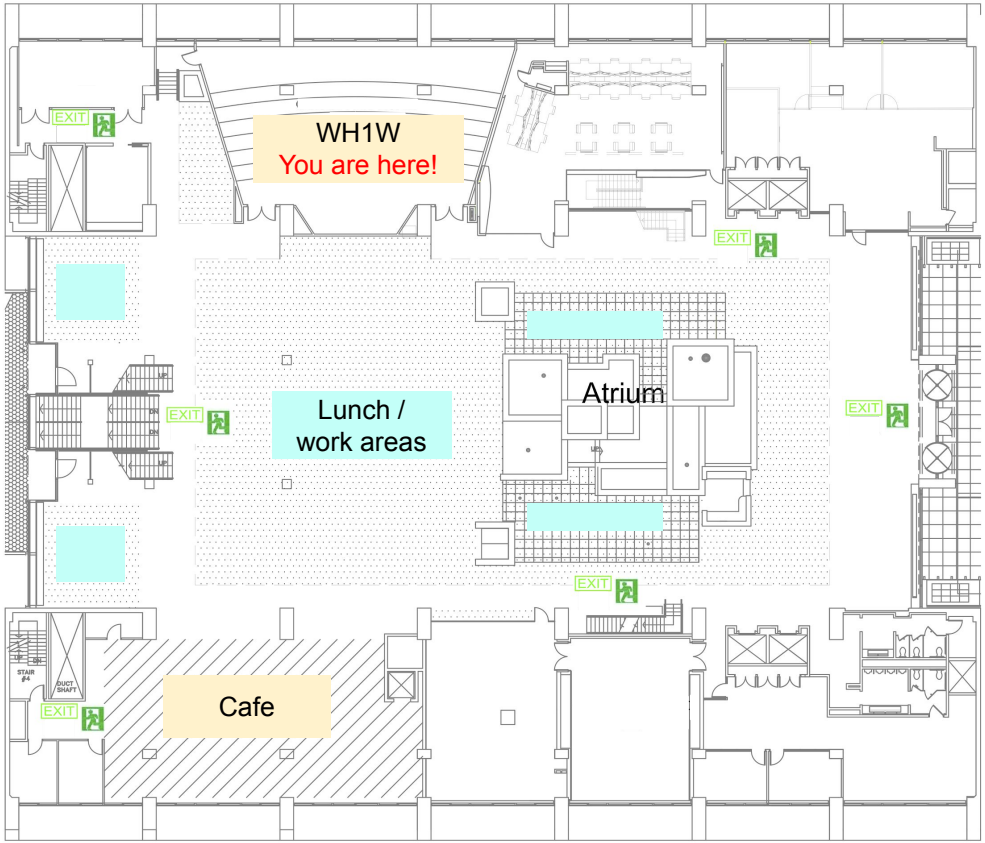
Meet at front of atrium. A guide will lead the way.

Walking route to Muon g-2 Experiment tour site

Meet at rear of atrium. A guide will lead the way.



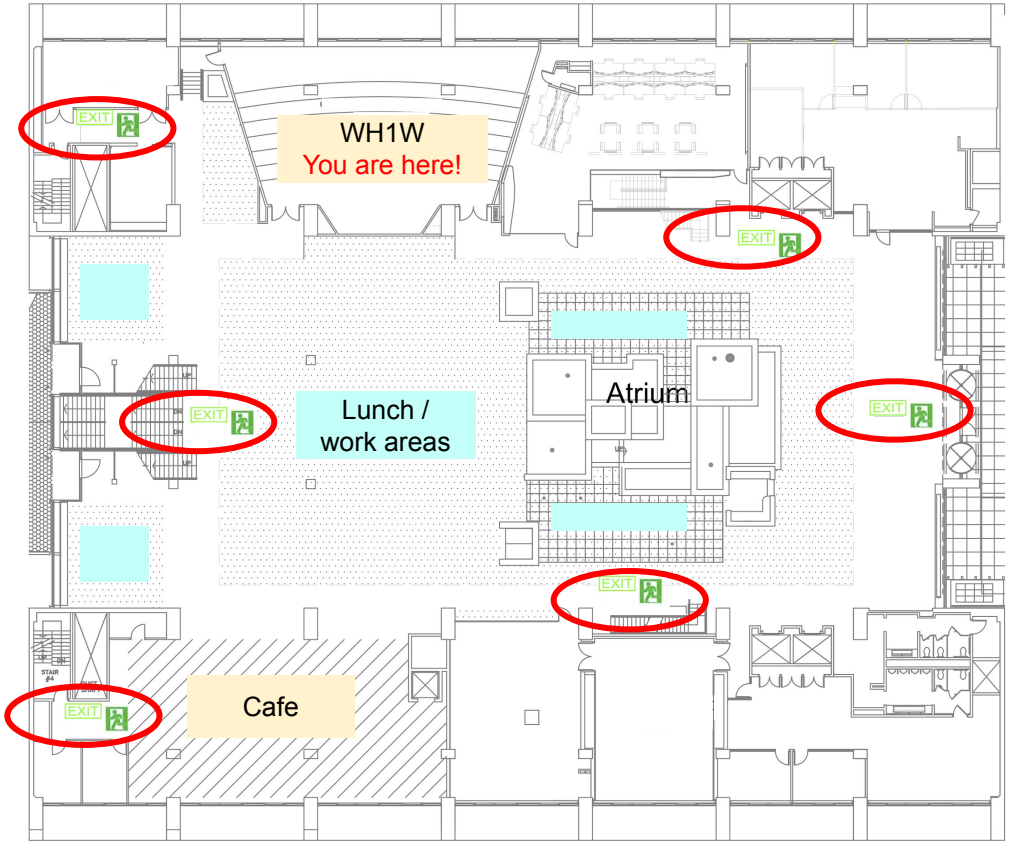
Emergency procedures



Fermilab

Emergency procedures

Atrium-level exits

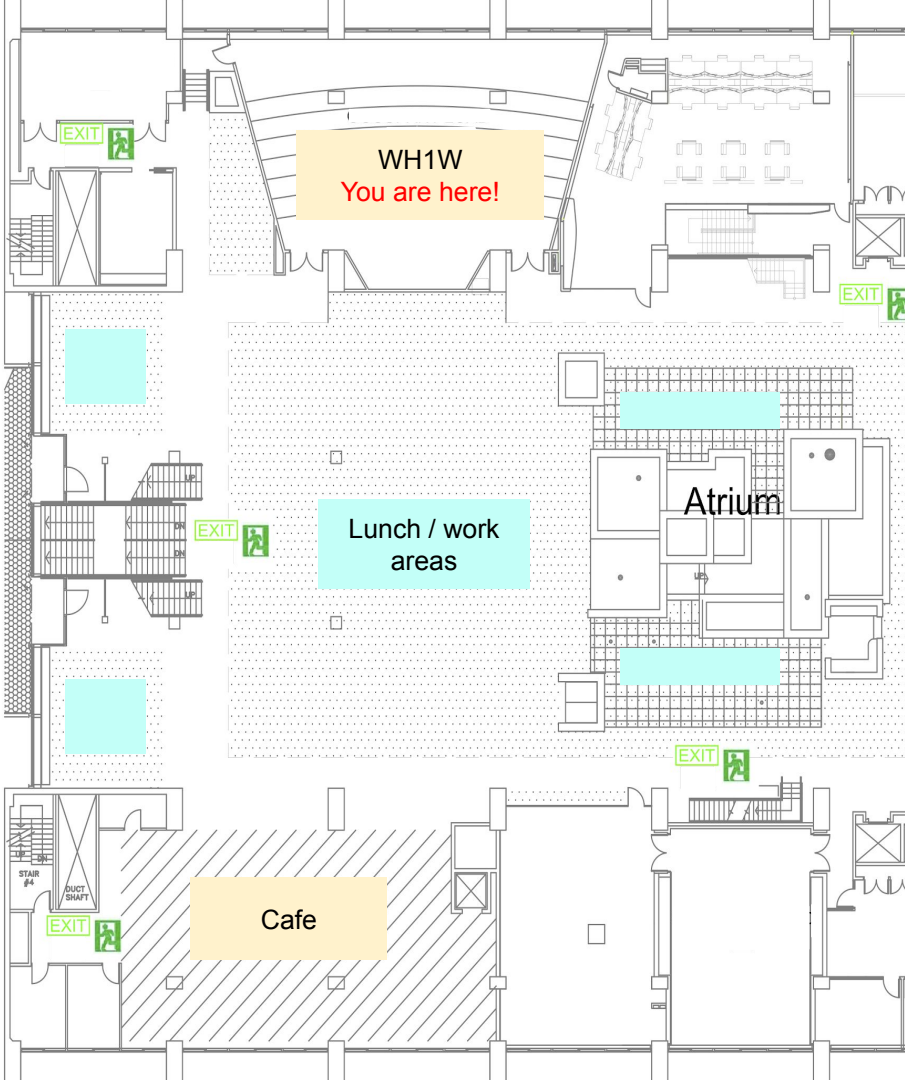


Fermilab

Emergency procedures

Fire alarm

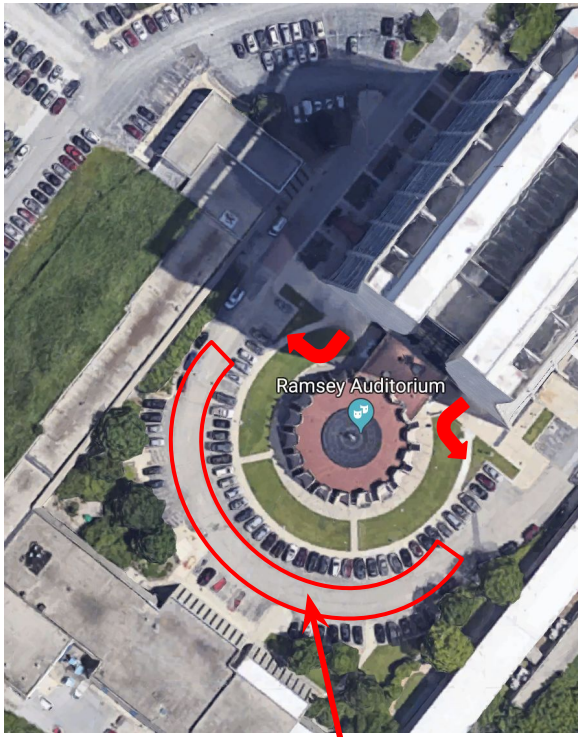
- **Flashing strobes on alarm**
- **Three beeps followed by voice evacuation instructions**



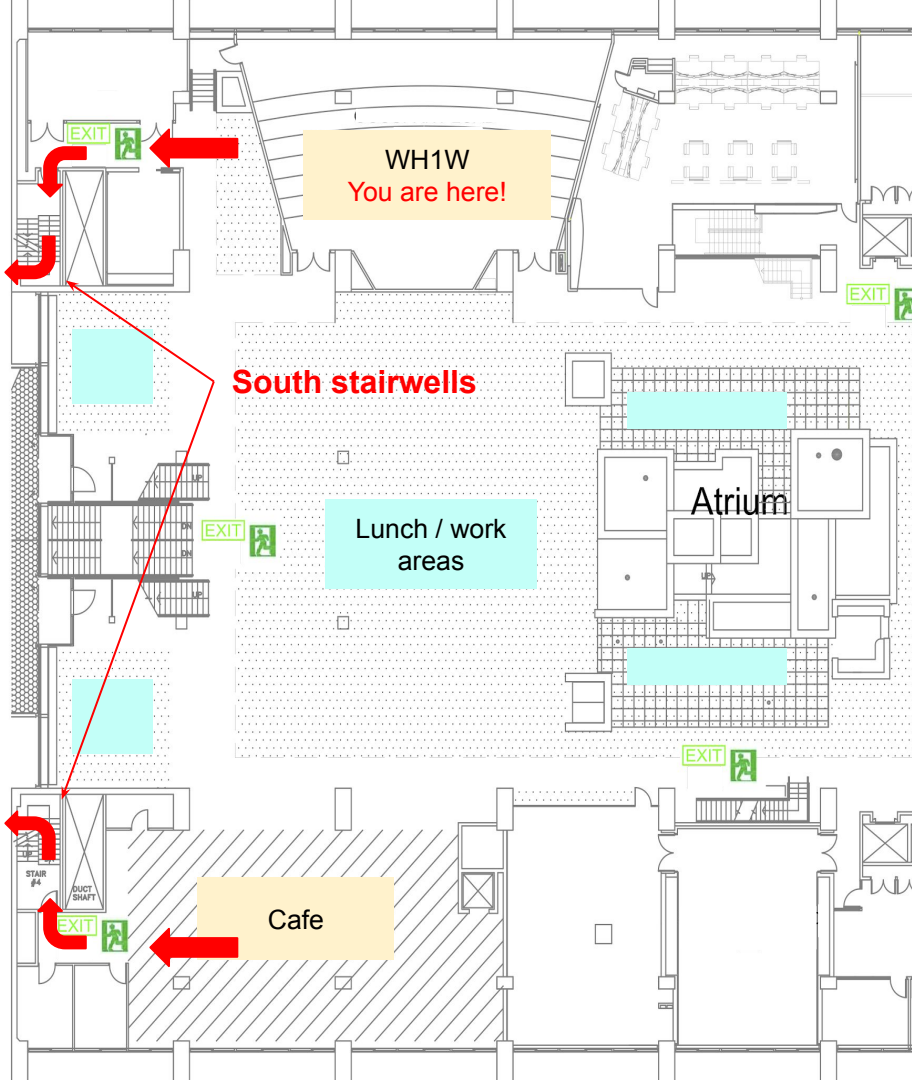
Emergency procedures

Atrium level fire evacuation routes

The south stairwells are also the route on most other floors



Once outside, gather in this area



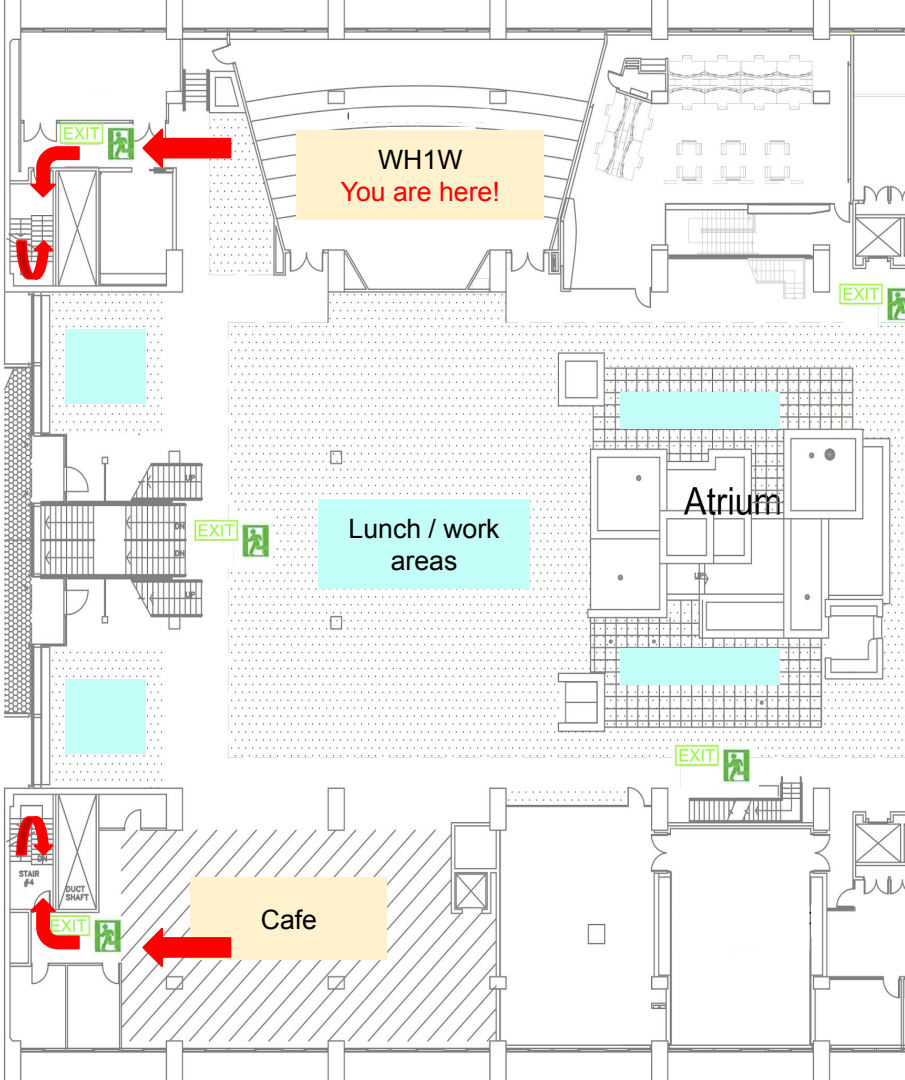
Emergency procedures

Tornado warning

- Issued over Site-wide Emergency Warning System
  (which will be tested tomorrow at 10 am!)
- Will be directed to proceed to tornado shelter

Wilson Hall tornado shelter

- Proceed to south stairwell
- Descend to basement tornado shelter area
  - Includes of the entire basement, tunnels



The people of INSS2019

INSS2019 lecturers

- **Week 1**
  - Concha González-Garcia
  - Tom Junk
  - Georgia Karagiorgi
  - Joachim Kopp
  - Bryce Littlejohn
  - Mark Messier
  - Goran Senjanović
  - Jessica Turner
  - Patricia Vahle

Look for

Faculty

on name tag

Most will be in attendance during the full week of their lecture(s). Talk to them!

INSS2019 lecturers

- **Week 2**
  - Francis Halzel
  - Bryce Littlejohn
  - Kendall Mahn
  - Ornella Palamara
  - Cheryl Patrick
  - Noemi Rocco
  - Goran Senjanović
  - Yvonne Wong

Look for

Faculty

on name tag

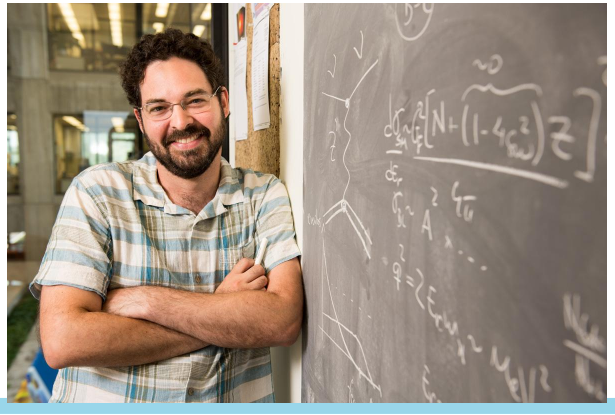
Most will be in attendance during the full week of their lecture(s). Talk to them!

INSS2019 local organizing committee

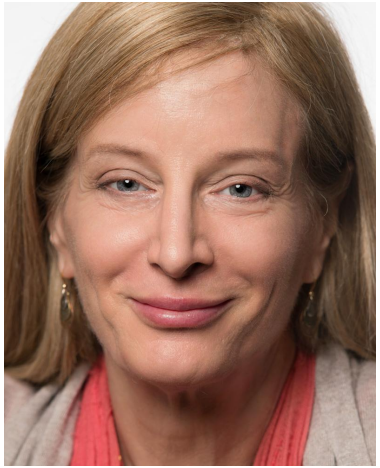
Kirsty Duffy

Look for
Local Committee
on name tag

Laura Fields



Pedro Machado



Erica Snider, chair

Fermilab

INSS2019 conference coordinators

Joy Pomillo

Look for
Conference Coordinator
on name tag

Melody Saperston

Questions? Comments? Suggestions?

- Find one of the organizing team
  - Local committee members
  - Conference coordinators
- Send email to inss2019@fnal.gov
- INSS2019 slack
  - Channel #asktheorganizers