

Telluric Line Hack Week
Schedule (v3)

The Flatiron Institute, 162 5th Avenue, New York, NY 10010

Monday, February 25

9:00 – Coffee and light breakfast

9:30 – Welcome and introduction from the LOC

9:45 – Roundtable discussion: Each workshop participant introduces himself or herself with one slide to describe their interests in telluric lines and goals for the meeting (2 minutes per participant)

11:15 – Coffee break

11:30 – Arpita Roy: An introduction to modern Doppler spectrometers and the measurement of stellar radial velocities

12:00 – Sharon Wang: The impact of telluric absorption lines on extreme precision Doppler measurements

12:20 – Lunch

1:30 – Reports from the field: Short presentations and discussion around participants' experiences with different approaches to mitigating the impact of telluric lines on Doppler measurements

2:30 - Megan Bedell: Next-generation techniques for inferring radial velocities and dealing with telluric lines

2:45 – Discussion and brainstorming of ideas for hack week projects, work time

5:00 – Break for dinner at nearby restaurants

Tuesday, February 26

9:00 – Coffee and light breakfast

9:30 – “Tag up” – Brief descriptions of proposed projects.

9:45 – Jean-Loup Bertaux: An introduction to radiative transfer calculations with TAPAS and the structure of Earth’s atmosphere, along with a discussion of Fabry-Perot Interferometers as a tool for calibrating Doppler spectrometers

10:15 – Iouli Gordon: The HITRAN database and molecular transitions of water vapor

10:40 – Coffee break

The rest of this day will be unstructured work time

4:00 – “Tag up” – Updates on progress, discussion of new ideas

4:30 – Break for dinner at nearby restaurants

Wednesday, February 27

9:00 – Coffee and light breakfast

9:30 – “Tag up” – Updates on progress, discussion of new ideas

The rest of this day will be unstructured work time

4:00 – “Tag up” – Updates on progress, discussion of new ideas

4:30 – Break for dinner at nearby restaurants

Thursday, February 28

9:00 – Coffee and light breakfast

9:30 – Presentations on results from Hack Week, ideas for new directions and collaborations

12:00 - Break