STScI | SPACE TELESCOPE SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

JWebbinars for Data Analysis Training

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JWebbinars

Overview:

A set of virtual, interactive, data analysis classes intended to teach the JWST community about methods and tools they can use to analyze and interpret JWST observations. These JWebbinars will make use of python tutorial notebooks and tools developed at STScI.

Objectives:

- Reach a broad fraction of the JWST community
- Accessible to the JWST partners (USA, ESA, CSA)
- Supports a diverse community at various stages of career, learning styles, location and availability.
- Interactive small group instruction
- Cover a significant fraction of the common JWST observing modes

JWebbinar Committee

Members

- Camilla Pacifici (CSA, NIRISS) -- Chair
- Susan Mullally (JWSTMO)
- Patrick Ogle (User support, INS)
- Amaya Moro-Martin (SMO)
- Erik Tollerud (DMD)
- Tim Rawle (ESA, NIRSpec)
- Duncan Farrah (JSTUC, ex officio)

Logistics

Events

- Approximately 20, 1—4 hour JWebbinars starting in April
- Up to ~30 Participants per event, popular events are repeated
- Flexible and varied scheduling to accommodate different time zones and schedules
- Interact with teacher and other participants via BlueJeans and Slack.

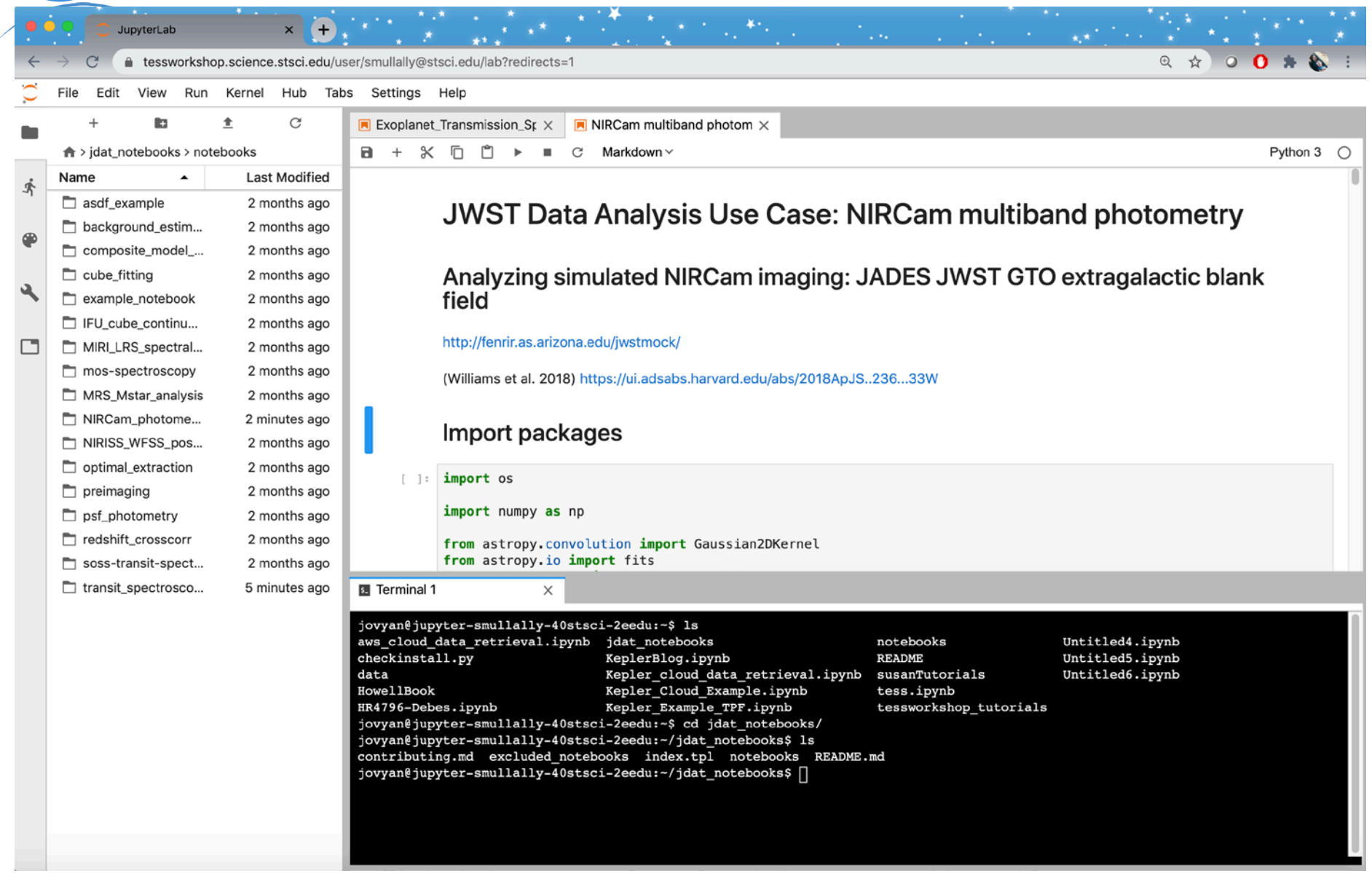
Online Programming Environment

- JupyterHub Platform hosted on AWS so participants do not need to install software.
- Separate JWebbinars will cover software installation on personal computers.
- Participants can download their work after the class.

Offline Materials

- Videos of the events will be made available on YouTube Channel
- Notebooks, data and install script made available for asynchronous learning.

JupyterHub Platform (example using TESS Data Workshop platform)



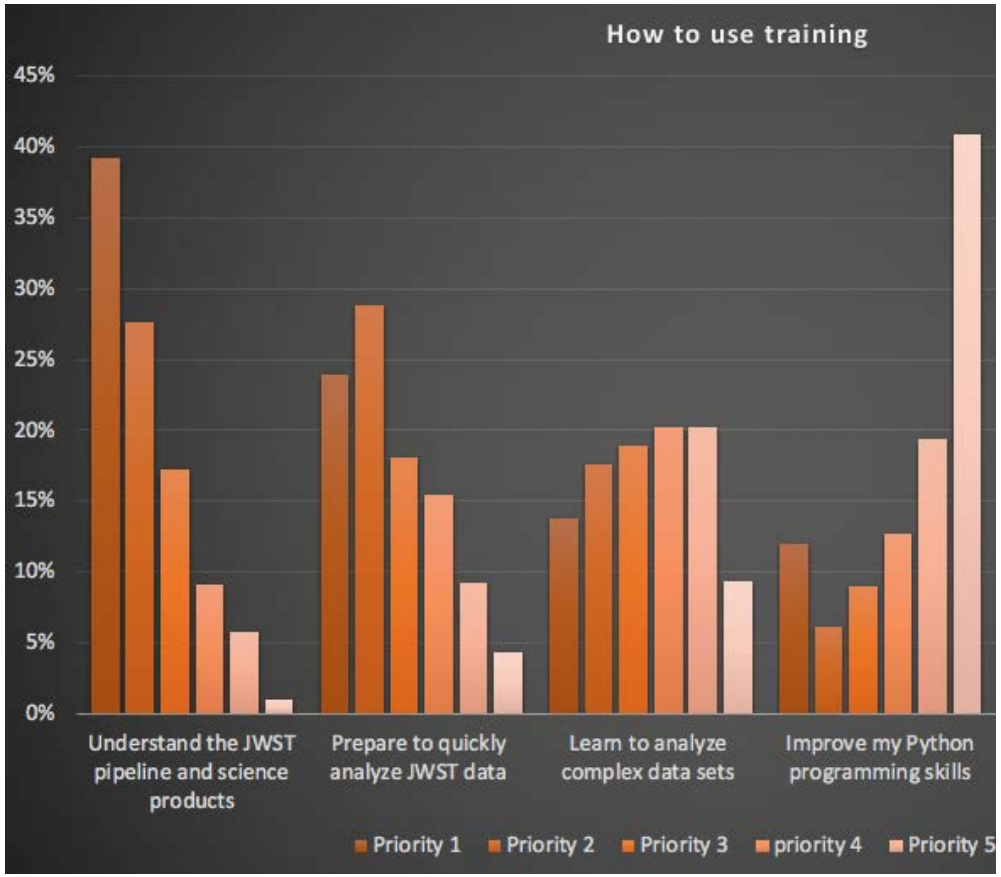
From your Web Browser:

- Jupyter notebooks
- JWST Software Installed
- Terminal
- Git repos
- Directory browser
- Text editor

JWebbinar Topics

- The Committee has not finalized the initial topics of the webinars. Topics will likely include:
  - Overview of tools, libraries, viz tools and data products
  - The JWST Pipeline: Imaging Example
  - The JWST Pipeline: Spectroscopic Example
  - NIRISS time-series observations
  - MOS spectroscopy with NIRSpec
  - IFU and Spectral Cubes
  - Stellar and galaxy photometry with NIRCam
- Topics and frequency of webinars will adjust depending on feedback and interest.
- Leverage existing JWST analysis notebooks and analysis tools

2019 Data Analysis Survey



JWebbinar Timeline

- Advertise the JWebbinars at the AAS in January.
- Announce and open registration for first set of JWebbinars in early March.
- Host 3-4 JWebbinars each month until launch.
- Repeat JWebbinars during commissioning and develop new ones after commissioning.