Session 6

The sixth session of the LSSTC DSFP focuses on time-domain analysis and interactive visualization.

Schedule

Day 1 — Searching for Periodicity and Building Better Models

Monday, Apr 30, 2018

- 08:00 AM 09:00 AM o Registration
- 09:00 AM 09:30 AM o Introduction of the new instructors
- 09:30 AM 10:30 AM o Important Signals in Astronomical Time Series; A. Miller :octocat:
- 10:30 AM 11:00 AM o Break
- 11:00 AM 12:00 PM o Periodic Signals and the Lomb Scargle Periodogram; A. Miller :octocat:
- 12:00 PM 01:30 PM o LUNCH
- 01:30 PM 02:30 PM o The Neverending Search for Periodicity: Techniques Beyond Lomb-Scargle; A.
 Miller:octocat:
- 02:30 PM 03:30 PM o Problem GPs + MCMC and the Period of an Eclipsing Binary; A. Miller :octocat:
- 03:30 PM 04:00 PM o Break
- 04:00 PM 04:45 PM o Building Better Inference Models; J. Guillochon <u>:octocat:</u>
- 04:45 PM 06:00 PM o Problem: Building Better Inference Models; J. Guillochon <u>:octocat:</u>

Day 2 — Beyond Periodicity & Introduction to 3D

Visualization

Tuesday, May 01, 2018

- 09:00 AM 10:00 AM o An Introduction to ParaView; A. Miller <u>:octocat:</u>
- 10:00 AM 10:30 AM o Break
- 10:30 AM 12:00 PM o Problem: Building 3D Renditions with ParaView; A. Miller :octocat:
- 12:00 PM 01:30 PM o LUNCH

- 01:30 PM 02:30 PM o State Space Models; C. Schafer
- 02:30 PM 04:00 PM o Problem: State Space Models; C. Schafer
- 04:00 PM 04:30 PM o Break
- 04:30 PM 06:00 PM o Features as a Representation of Time Series for Classification; A. Miller :octocat:
- 06:00 PM ??:?? PM o Group dinner

Day 3 — Introduction to Bokeh

Wednesday, Apr 02, 2018

- 09:00 AM 10:00 AM o Introduction to Bokeh; J. Guillochon <u>:octocat:</u>
- 10:00 AM 10:30 AM o Break
- 10:30 AM 12:00 PM o Problem Building Interactive Plots with Bokeh; J. Guillochon :octocat:
- 12:30 PM ??:?? PM o BREAK

Day 4 — Real-World Interactive Datasets

Thursday, Apr 03, 2018

- 09:00 AM 10:00 AM o An Introduction to Glue-Viz; A. Miller :octocat:
- 10:00 AM 10:30 AM o Break
- 10:30 AM 12:00 PM o Linking 3D Datasets with Glue; A. Miller <u>:octocat:</u>
- 12:00 PM 01:30 PM o LUNCH
- 01:30 PM 05:30 PM o Problem Interactive Exploration
- 05:30 PM 06:00 PM o Interactive Visualization Presentations

Day 5 — Communicating & Dataing In the Real World

Friday, Apr 04, 2018

- 09:00 AM 10:00 AM o The Science of Science Communication; L. Walkowicz :octocat:
- 10:00 AM 10:30 AM o Break
- 10:30 AM 12:00 PM o Problem Understanding Audiences in Communication; L. Walkowicz :octocat:
- 12:00 PM 01:30 PM o LUNCH
- 01:30 PM 02:30 PM o Data Ethics: Astronomical considerations; L. Norén
- 02:30 PM 03:30 PM o Problem Data Ethics; L. Norén
- 03:30 PM 04:30 PM o Data Ethics: Considerations Beyond Astronomy; L. Norén
- 04:30 PM 05:00 PM o Session 6 wrap up; A. Miller :octocat: