2nd NCSP Workshop
"Preparing for DKIST: Image treatment and time series"
13-15 January 2020, Northridge, CA

Agenda

Astro Lab, Eucalyptus Hall (1st floor, EH 2104)
California State University at Northridge
18111 Nordhoff Street
Northridge, CA 91330

January 13, 2020

8:30 – 8:45 Welcome, logistics

8:45 - 9:30 DKIST and imaging instruments **G. Cauzzi, A. Fehlmann**

9:30 - 10:15 Diagnostics accessible with VBI and Coronal Imager **D. Christian**

coffee break

10:45 – Dean Jerry Stinner, College of Science and Math**, Welcome**

10:55 – 11:45 Atmospheric Seeing and Adaptive Optics **J. Marino**

11:45 – 12:15 Image quality metrics **K. Reardon**

12:15 - 13:30 LUNCH
Lunch activity: install & test software

13:30 – 14:00 Image quality metrics – exercise (*) **K. Reardon**

14:00 – 15:30 Image reconstruction: Speckle & (MO)MFBD; exercise (*) **K. Reardon**

coffee break

16:00 – 16:45 Image reconstruction exercise (*; cont.)

16:45 – 17:30 Speckle application to existing instruments: the experience of Big Bear Solar Observatory **V. Yurchyshyn**

********** Welcome reception at CSUN *********

Orange Grove Bistro, Lamb's Banquet Room (6:00 – 8:30 pm)

Note: topics with a (*) will include an exercise session

January 14, 2020

8:30 – 9:30 Destretching: first concepts and exercise (*) **K. Reardon, G. Cauzzi**

9:30 – 10:00 Destretching of time series: concepts **K. Reardon**

coffee break

10:30 – 11:15 Destretching of time series: exercise (*) **K. Reardon, D. Jess**

11:15 – 11:45 DKIST data format and retrieval **A. Davey**
11:45 – 12:15 DKIST pointing calibration methods **A. Davey**

12:15 - 13:30 LUNCH
Student's talk: ***Natalie Alzate***
"Propagating Disturbances as Tracers of the Near-Sun Slow Solar Wind"

13:30 – 14:30 Differential refraction (*) **K. Reardon**

14:30 - 15:15 Feature recognition / tracking techniques **M. Gosic**

coffee break

15:45 – 17:30 Feature recognition / tracking techniques (*) **M. Gosic**

********* FREE EVENING **********

January 15, 2020

8:30 – 8:45 Student's talk: "Tracking photospheric bright points" **S. van Kooten**

8:45 – 10:30 Temporal patterns: Science examples & exercises (*) **D. Jess, C. Cadavid**

coffee break

11:00 - 12:00 Science examples: Wave propagation in a sunspot **D. Jess, D. Christian**

12:00 - 13:30 LUNCH
Lunch activity: Students' talk
Oana Vesa *"Gravity waves in the photosphere"*
Benoit Tremblay *"Reconstructing velocity fields with DeepVel"*

13:30 - 15:00 Exercise on wave propagation (*) **D. Jess, D. Christian**

15:00 – 15:30 Multi-channel alignment: concepts **K. Reardon**

coffee break

16:00 – 17:00 Multi-channel alignment: exercises (*) **K. Reardon**

17:00 – 17:30 Q & A; end of workshop

********* END OF WORKSHOP **********