

## *Software Systems for Astronomy*

23 July – 03 Aug, 2018

(last update 08-Oct-2017)

<b>DoW</b>	<b>Day</b>	<b>Topic</b> (Lecture = 9:00 – 11:45 with one break)	<b>Lab</b> (1:00 – 3:45)	<b>Pages in SSfA textbook</b>
Mon	23-Jul	<b>Observation Planning Software:</b> Airmass Plotting Tools; Target Planning	Y	3-13
Tue	24-Jul	<b>Target planning</b> (continued); <b>Choice of Languages:</b> C/C++; Python; IDL (+ Java, PHP, PERL, CSH, IRAF)	Y	15-19
Wed	25-Jul	<b>Choice of Languages</b> (cont.); <b>Data and Data Archives Pt. I:</b> FITS Format, Data Reduction Software	Y	23-26
Thu	26-Jul	<b>Data and Data Archives Pt. II:</b> Data Reduction Software (cont.); Image Display Tools Field Trip to <i>Imiloa Planetarium</i> (TBC)	1/2	27-36
Fri	27-Jul	<b>Control Systems Pt. I:</b> <i>Telescope Control:</i> Axes Control; Time; Pointing and Tracking, Auto-guiding	Y	39-50
Sat	28-Jul	<i>Free Day</i>	N	51-61
Sun	29-Jul	<i>Free Day</i>	N	-
Mon	30-Jul	<b>Control Systems Pt. III:</b> <i>Telescope Control:</i> Field rotation, Active Optics and Adaptive Optics <b>Guest Lecture:</b> Randy Campbell (TBC)	1/2	62-72
Tue	31-Jul	<b>Control Systems Pt. III:</b> Adaptive Optics - guide star tools and web services + <b>Control Systems Pt. IV:</b> <i>Instrument Control</i>	1/2	73-78
Wed	01-Aug	<b>Control Systems Pt. IV:</b> <i>Instrument Control</i> (cont.) + <b>Future of SSfA:</b> Software Engineering; Parallelism + <b>Guest Lecture:</b> Alan Tokunaga (TBC)	1/2	79-92
Thu	02-Aug	<b>Tour of Mauna Kea Summit Observatories</b>	N	-
Fri	03-Aug	<b>Student Presentations</b>	N	-