Software Systems for Astronomy

24 July – 04 Aug, 2017

Day	Topic	Pages in SSfA textbook
1	**Observation Planning Software:** Airmass Plotting Tools; Target Planning	3-13
2	**Target planning** (continued); **Choice of Languages**: C/C++; Python; IDL (+ Java, PHP, PERL, CSH, IRAF)	15-19
3	**Choice of Languages** (cont.)**; Data and Data Archives Pt. I:** FITS Format, Data Reduction Software	23-26
4	**Data and Data Archives Pt. II:** Data Reduction Software (cont.); Image Display Tools (includes data visualization at `Imiloa planetarium)	27-36
5	**Control Systems Pt. I:** *Telescope Control*: Axes Control; Time; Pointing and Tracking	39-50
Weekend	**Tour of Mauna Kea Summit Observatories**	-
6	**Control Systems Pt. II:** *Telescope Control***:** Offset and non-sidereal guiding; Field Rotation	51-61
7	**Control Systems Pt. III:** *Telescope Control***:** Active Optics and Adaptive Optics	62-72
8	**Control Systems Pt. III:** Adaptive Optics - guide star tools and web services **+ Control Systems Pt. IV:** *Instrument Control*	73-78
9	**Control Systems Pt. IV:** *Instrument Control* (cont.) + **The Future of SSfA**: Software Engineering; Parallel Computing	79-92
10	**Student Presentations**	