Program

Monday June 29

9h00 – 9h30: Registration
9h25: Welcome
9h30 – 11h00: **Cornelia Lang** " Fundamentals of radio astronomy "
11h00 – 11h30: Coffee break
11h30 – 12h30: **Cornelia Lang** "AIPS overview"
12h30 – 14h00: Lunch break
14h00 – 15h45: Hands-on radio interferometry (AIPS) [course materials 1 (data and software) , course materials 2 (notes) , course materials 3 (instructions)]
15h45 – 16h15: Tea Break
16h15 – 18h00: Hands-on radio interferometry (AIPS)

18h30: Cocktail

Tuesday June 30

9h30 – 11h00: **Katherine Blundell** " Imaging, deconvolution, calibration and editing "
11h00 – 11h30: Coffee break
11h30 – 12h30: Hands-on radio interferometry (AIPS)
12h30 – 14h00: Lunch break
14h00 – 15h45: Hands-on radio interferometry (AIPS)
15h45 – 16h15: Tea Break
16h15 – 18h00: Hands-on radio interferometry (AIPS)

Wednesday July 1

9h30 – 10h30: **Eduardo Ros** " Data archives and surveys "
10h30 – 11h00: Coffee break
11h00 – 12h00: **Anita Richards** " CASA overview "
12h00 – 13h30: Lunch break
13h30 – 15h15: Hands-on radio interferometry (CASA) [course materials]
15h15 – 15h45: Tea Break
15h45 – 17h30: Hands-on radio interferometry (CASA)

Thursday July 2

9h30 – 11h00: **Zsolt Paragi** “VLBI and and low frequency interferometry”
11h00 – 11h30: Coffee break
11h30 – 12h30: Hands-on radio VLBI (Difmap) [course materials]
12h30 – 14h00: Lunch break
14h00 – 15h45: Hands-on radio VLBI (Difmap)
15h45 – 16h15: Tea Break
16h15 – 18h00: Hands-on radio VLBI (Difmap)

Friday July 3

9h30 – 11h00: **Francesco Longo** “ Fermi/Agile and γ-ray data analysis ” *(for the second part please refer to the hands-on page)*
11h00 – 11h30: Coffee break
11h30 – 12h30: **German Hermann** “ Ground based γ-ray astronomy ”
12h30 – 14h00: Lunch break
14h00 – 15h45: **François Lebrun** “ X-ray and γ-ray detection ”
15h45 – 16h15: Tea Break
16h15 – 18h00: Hands-on Fermi data [course materials]

Monday July 6

9h30 – 11h00: **Aneta Siemiginowska** “ Statistics in X-ray data analysis ” (addendum: python.pdf)
11h00 – 11h30: Coffee break
11h30 – 12h30: **Christian Motch** “ Data archives and surveys ”
12h30 – 14h00: Lunch break
14h00 – 15h45: Hands-on: X-ray imaging [course materials]
15h45 – 16h15: Tea Break
16h15 – 18h00: Hands-on: X-ray imaging

Tuesday July 7

9h30 – 11h00: **Mike Nowak** " X-Ray spectral analysis " *** updated version from the 2nd School on Multiwavelength astronomy available***
11h00 – 11h30: Coffee break
11h30 – 12h30: Hands-on: X-ray continuum
[course materials]
12h30 – 14h00: Lunch break
14h00 – 15h45: Hands-on: X-ray continuum
15h45 – 16h15: Tea Break
16h15 – 18h00: Hands-on: X-ray continuum

Wednesday July 8

9h30 – 11h00: **Julia Lee** " High resolution X-ray spectroscopy "
11h00 – 11h30: Coffee break
11h30 – 12h30: Hands-on: High resolution X-ray spectroscopy
[course materials]
12h30 – 14h00: Lunch break
14h00 – 15h45: Hands-on: High resolution X-ray spectroscopy
15h45 – 16h15: Tea Break
16h15 – 18h00: Hands-on: High resolution X-ray spectroscopy

Thursday July 9

9h30 – 11h00: **Sera Markoff** " Broadband spectral energy distribution " *** updated version from the 2nd School on Multiwavelength astronomy available***
11h00 – 11h30: Coffee break
11h30 – 12h30: Hands-on SED fitting
[course materials]
12h30 – 14h00: Lunch break
14h00 – 14h45: **Jörn Wilms** " How to write a good proposal "
14h45 – 15h15: **Tomaso Belloni** " How to give a good talk "
15h15 – 15h45: School evaluation
15h45 – 16h15: Tea Break
16h15 – 18h00: **Mark Allen** " Virtual Observatory " (external link to a wiki page for the session)

20h45: Banquet «Au Bistrot de la Montagne »

Friday July 10

9h30 – 11h00: **Michiel van der Klis** " X-ray timing analysis " *** updated version from the 2nd School on Multiwavelength astronomy available***
11h00 – 11h30: Coffee break
11h30 – 12h30: Hands-on: X-ray timing [course material]
12h30 – 14h00: Lunch break
14h00 – 15h45: Hands-on: X-ray timing
15h45 – 16h15: Tea Break
16h15 – 18h00: Hands-on: X-ray timing

Contributors to the hands-on sessions: Mark Allen, Tomaso Belloni, Thomas Bloch, Katherine Blundell, Stéphane Corbel, Matthias Kadler, Cornelia Lang, Elmar Koerding, Julia Lee, Manuel Linares, Francesco Longo, Sera Markoff, James Miller-Jones, Christian Motch, Mike Nowak, Zsolt Paragi, Anita Richards, Jérome Rodriguez, Eduardo Ros, Aneta Siemiginowska, Phil Uttley, Michiel van der Klis, Rudy Wijnands, Joern Wilms, Michael Wise

Course Materials

(compendium of the above listed in the program; *no* new material here)

- June 29: Notes from the hands-on session (direct download-link)
- June 29/30: Instructions for imaging and self-calibration of the 3C129 dataset
- June 29/30: Data and software (AIPS) for the hands-on session
- July 1: CASA for radio interferometry data reduction
- July 2: Hands-on radio VLBI
- July 3: Fermi data analysis
- July 6: Hands-on session on analyzing X-ray image data
- July 7/8/9: Data and instructions for X-Ray and SED hands-on sessions
- July 9: Wiki for Virtual Observatory (VO) session (external link)
- July 10: Hands-on X-Ray timing

For software installation please refer to the software installation pages .
For an ISIS introduction see J. Wilms' lecture on X-ray astronomy .