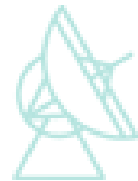


Observing and Hands-On Sessions

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MAX-PLANCK-GESellschaft



LOFAR

Max-Planck-Institut
für Radioastronomie

Wednesday: Observing Session

- We have arranged for a bus to take you to Effelsberg for an observation session and a tour on Wednesday
- The bus can only hold 30 people
- You will split up into two groups
 - Group I will travel to Effelsberg starting at 9:00 sharp from the MPIfR
 - Group II will begin a remote observing session at 9:00
- At noon, Group II will travel by bus to Effelsberg
- We have a common lunch (bar-b-que) at Effelsberg
- Group I returns to Bonn for a remote observing session, while Group II remains in Effelsberg for observing
- Group II returns to Bonn in the evening



Effelsberg Observations

- At Effelsberg, you will break up into three subgroups of at most 10 students
 - Group I
 - **Continuum/Polarization**
 - **Spectral Line**
 - **Pulsars**
 - Group II
 - **Continuum/Polarization**
 - **Spectral Line**
 - **Pulsars**
- You must decide ahead of time which group you will join
- Sign-up sheets are located outside; sign up by lunch tomorrow
- Please pick up the corresponding colored ticket for your group, and take it with you to Effelsberg



Remote Observations

- In Bonn, you will break up into one of three different remote observing sessions
- Each observation session will last ~3 hours
- Your options:
 - Jodrell Bank 42' Pulsars & ISM
 - Jodrell Bank MkII Pulsar Beams
 - LOFAR

Reminder

- For Group I, the bus will leave at 9:00
- The schedule is tight, so the bus will not wait for you
- The bus can only hold 30 people, so if you miss the morning bus, there might not be space for you to join the afternoon session
- **If you join Group I, arrive at MPIfR no later than 8:50**
- For all groups, bring you colored observation ticket, so that we can divide you up into the proper groups quickly



Thursday–Friday: Hands-On Sessions

- You will also join a data processing group for the hands-on sessions
- The group you join can be independent of your selection for the observation sessions on Wednesday
- Separate sign-up sheets are located outside
 - The sign-up sheets include a short summary of the planned data reduction project, as well as the room numbers for the data reduction sessions on Thursday and Friday
- Sign up early to get the session you want
- Sign up by lunch on Tuesday



Hands-On Sessions

- Mapping of Total and Polarized Emission of Galaxies
- Discovering Radio Pulsars
- Millisecond Pulsar Timing
- Single Station LOFAR Processing
- From the Orion Nebula to Distant Megamaser Galaxies —
Molecular Spectroscopy at K-band
- Mapping an Outflow in Star-forming Regions with CO Lines
- Data Analysis of HI Data Cubes Using CASA
- Variability Study of AGNs

Hands-On Presentations

- Each hands-on group will write up a presentation for Friday afternoon
- 10 minutes presentation + 5 minutes for questions
- Each group will nominate a student speaker for the presentations



Proposal Writing

- On Friday morning there will be a lecture on proposal writing
- As a homework exercise, you are asked to write a proposal to use the Effelsberg 100-m telescope
- **Proposals must be submitted by noon CEST on Monday, October 4th to essea@lists.mpifr-bonn.mpg.de**
- Your proposal will be examined by members of the ESSEA organizing committee, lecturers, and hands-on tutors
- We will return comments to you by the following week
 - The goal is to give you feedback to help you improve your proposal writing skills
- **The best several proposals will be entered into the next official Effelsberg proposal round (deadline October 11th)**



Science Projects

- As you hopefully learn single dish radio astronomy this week, think over in your spare time what you would want to do scientifically if you were given time on a single-dish telescope

