

Interferometry Imaging - discussion

- What happens to the data with large aperture?
- Artefacts with imaging: bad (u,v) sampling or bad use of the image reconstruction algorithm ?
- Are there objective criteria for a good reconstruction ?
- Should we perform model fitting in the same time ?
- What are the practical limitations: complexity, dynamic range, sensitivity, photometry accuracy?

Young stellar objects - discussion

- How important is the dynamic range ?
- Can image reconstruction be more sensitive if there are spectral signatures ?
- How important is to have 4, 6 or 10 telescopes for such detection ?
- Is there other phenomena like wind, binarity that can enhance detection of planet signatures ?

Stellar surfaces - discussion

- **Main objective** ? influence on stellar evolution, on different stellar type, understanding solar physics,....?
- **Spatial variations:** different scales (LD,...) to be constrained
 - ➔ 1st lobes: Limb-darkening / Importance of short spacing
 - ➔ Nth lobes: Size of granules, how far? more telescopes....?
- **Importance of fluctuations:**
 - temporal fluctuations \Rightarrow minimum time scale (months, years)
 - spectral fluctuations \Rightarrow spectral resolution / line equivalent width
 - angular fluctuations \Rightarrow instrument: longest baselines, wide spatial frequency range / models: contrast of granules, effective size
- **How to relate observations to model:** similar analysis as CMB fluctuations?
- **Image reconstruction:** artefacts, what should be trusted ?
- **Model parameter space:** what is really constrained otherwise and what can interferometry can bring? (Non-grey RT,)

Active Galactic Nuclei - discussion

- Modeling: no unique solution. So can interferometry imaging help??
- Typical size of the clumps? Background level (short spacing)?
- Which wavelength is best suited?
- Dynamical range? Image contrast? Field of view?
- Typical temporal evolution?
- Spectral features? Which spectral resolution?
- Which parameters can be constrained? Inclination? Extension?
- How many visibilities required? Pixels? \Rightarrow # telescopes, uv coverage? configuration?
- How many objects within range (sensitivity, distance,...)?

Imaging Interferometers - discussion

- 6T vs. 4T (VLTI, CHARA)? Do we need more telescopes?
- Length of uv tracks? Importance of Delay Lines, pops?
- How to improve sensitivity? AO, detectors, space?
- Collaborations: share of scientific objectives, share of time, complementary facilities, universal general Data Reduction tool, share of image reconstruction, ...
- Each interferometers seems to have its own image reconstruction? How to benefit from each other? Combining data from different facilities?
- Need for upgraded OI-FITS format?
- How to prepare the future?

Circumstellar environments - discussion

- From diameters of late-type stars at different wavelength to the structure of the molecular shells
- Circular symmetry is important, but departure from this symmetry plays a key role: impact of uv sampling?
- Importance of wavelength range, spectral resolution?
- Time constraint seems to be critical. How critical? Time series of observations?
- How to reconcile physical models and ad-hoc models?
- Theoretical inputs? Apart from Supergiants, are there hydrodynamics simulations which could feed radiative transfer models?