Goals of the workshop

- Overview of European (mostly) activities in the field
- Interactions between astronomers, post processing and AO communities
- Identification of the key aspects to be addressed in the coming years
- Identification of the available frameworks and resources (manpower and hardware) to support these activities
Comments and remarks #1

• PSF reconstruction from telemetry
  – Cn2 and r0 are absolutely required, accuracy TBD
    • GLAO
      – accuracy on Cn2 seems to be a rather coarse one
      – r0 to within ~10%
    • Requirements for other AO flavours TBD
  – Do we need high spatial / temporal resolution on Cn2/r0, and if yes, how to get it?
  – Cn2/r0 estimation should be done from AO telemetry preferentially to account for full chain of atmospheric + instrument systematics
Comments and remarks #2

• AO community ↔ astronomers
  - We need to know what are the actual PSF requirements and on which parameters as a function of the science programme / AO mode
    • E.g. provide astronomers a series of reconstructed PSFs (with its intrinsic errors) and have astronomers estimate error budgets on their science
    • Deduce specs for PSF reconstruction on key parameters that matter most to astronomers (e.g. fitting functions params)
  - For ELTs, can we approach the different consortia?
    • e.g. define something similar to what has been done for MUSE?
Comments and remarks #3

• AO community ↔ post-processing community
  – Co-estimation from telemetry and post-processing image data is a way forward (hybrid approaches) and should be pursued

• For ELTs data-reduction should be done along with the instrument development
  – Inputs from the two previous points should be included directly in the data-reduction routines
  – Parallel approach: team up with e.g. SEXtractor people to have a new push-button AO module