

Science Case

- Composition from iron knee to the ankle
- Anisotropy of proton component (galactic vs extragalactic origin)
 priority for coming months
- Air shower physics, hadronic interaction beyond LHC-scale, tomography
 next priority
- Emission process at high frequencies for "insiders"
- Thunderstorm research very unpredictable, but important to always mention!

SKA vs LOFAR

- Clearest advantage:
 Statistics >10x Large effective duty cycle essential!
- Higher quality in many respects:
 better footprint coverage
 larger bandwidth
 better particle detectors
 better antenna calibration (?)
 is this just incremental?
 or game-changing? (tomography, hadronic interactions, etc.)
- Travel to Australia instead of Exloo

Timeline

or: why Anne will not go on holiday this summer



- Make baseline design particle detector
- Run simulation to demonstrate science potential for composition & anisotropy
- Write ECP + Use Case

summer

Stockholm meeting; work towards KSP

~ 6-12 months

- Study potential air shower physics/tomography
- Internal evaluation: go/no-go

baseline design

~ 100 flat scintillator detectors (1-4 m² size) between SKA stations (~ 35 m spacing or more) also 100-200m outside core

for ECP: simulation with simple choices

750m **SKA-LOW1**

for all other details, plans, and promises: **Trello**





"Let's have a carvery!"