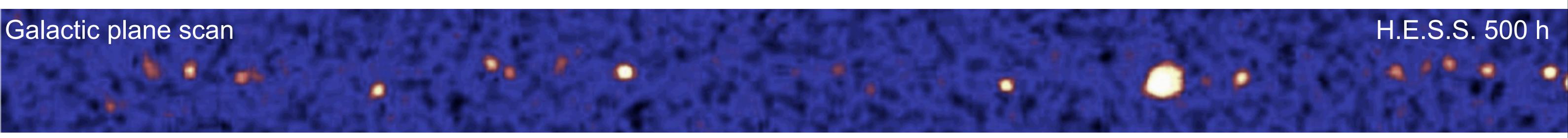
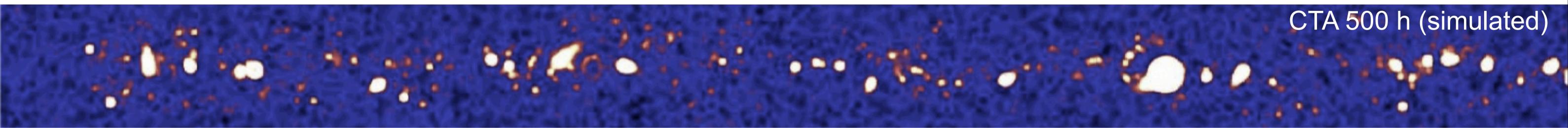
Matter and the Universe

Topic 3: Matter and Radiation from the Universe

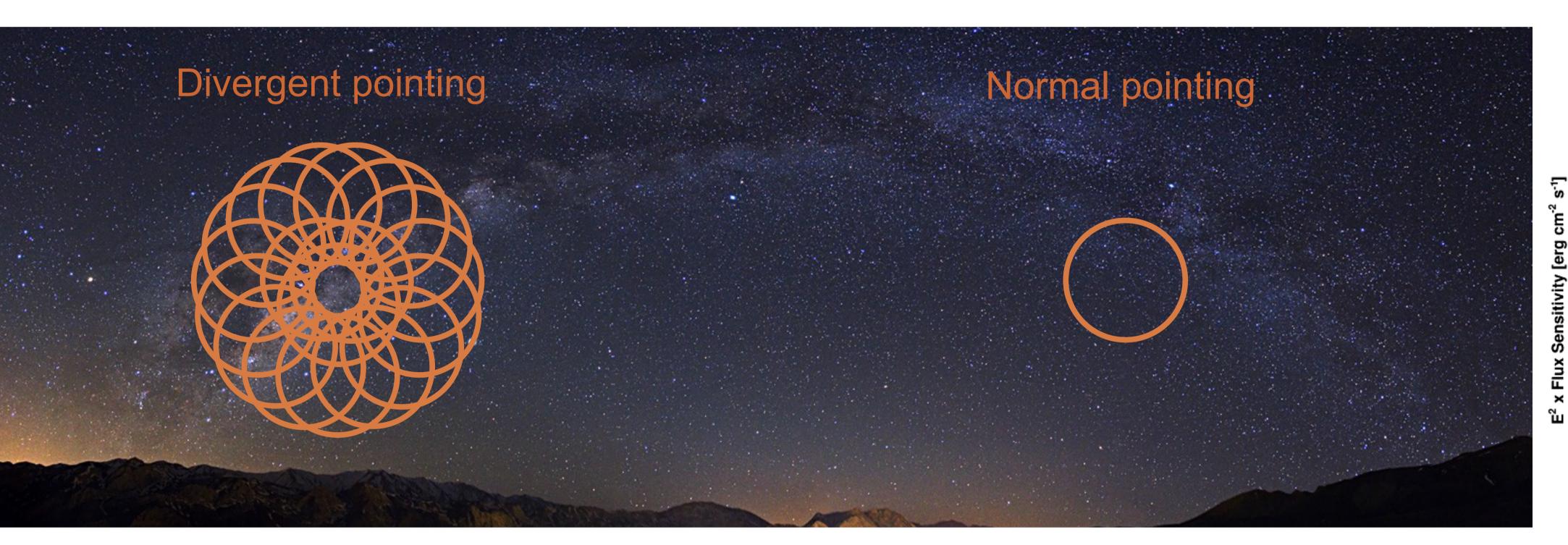
Towards a Whole-Sky TeV Survey

Lucie Gerard, Anneli Schulz (DESY)

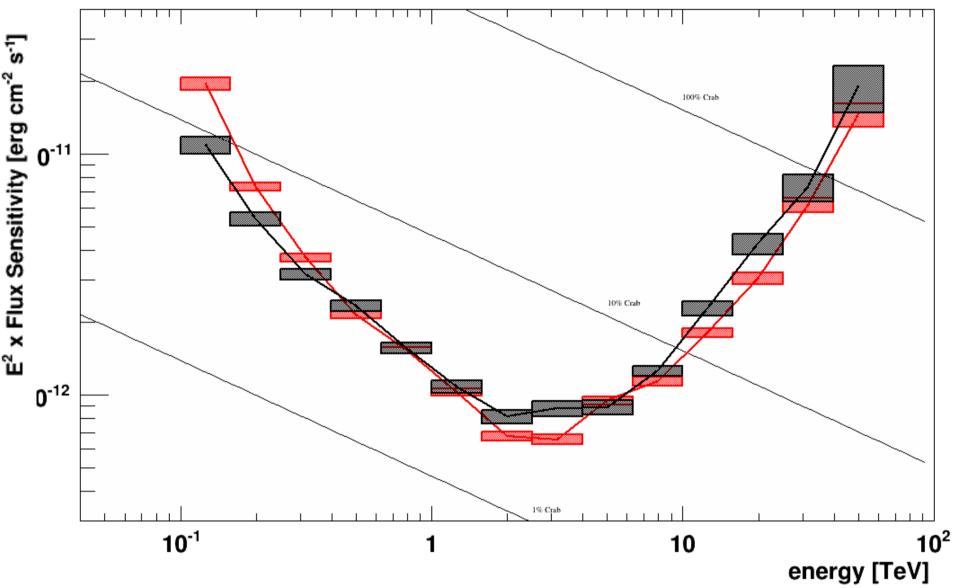




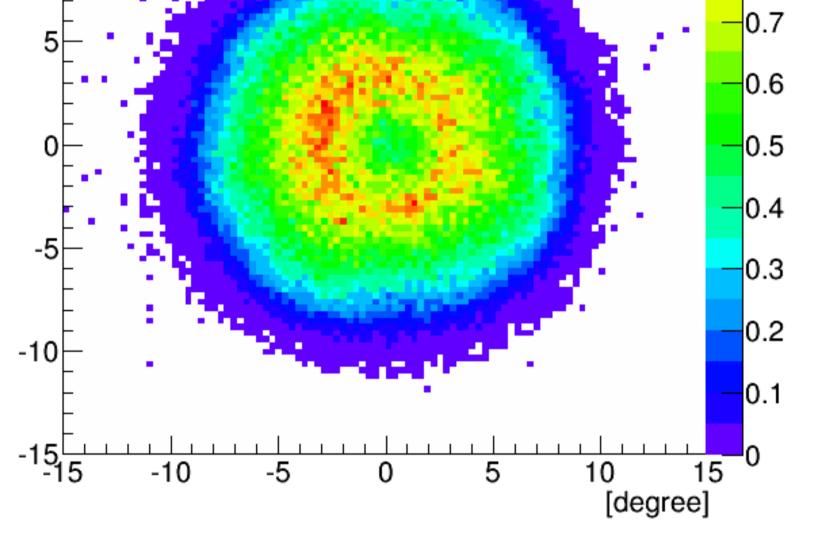
Exploring CTA Observing Modes for Surveys – Divergent Pointing



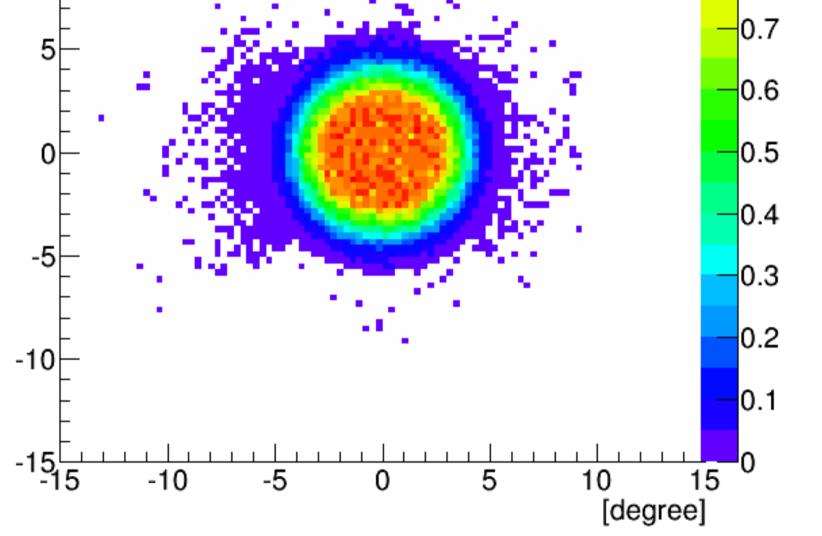
Divergent (red) and normal (back) pointing sensitivity curves. The ratio of observing time equals ratio of the field of view area.



The road towards performance evaluation:



CTA acceptance map for gamma-rays using divergent pointing.



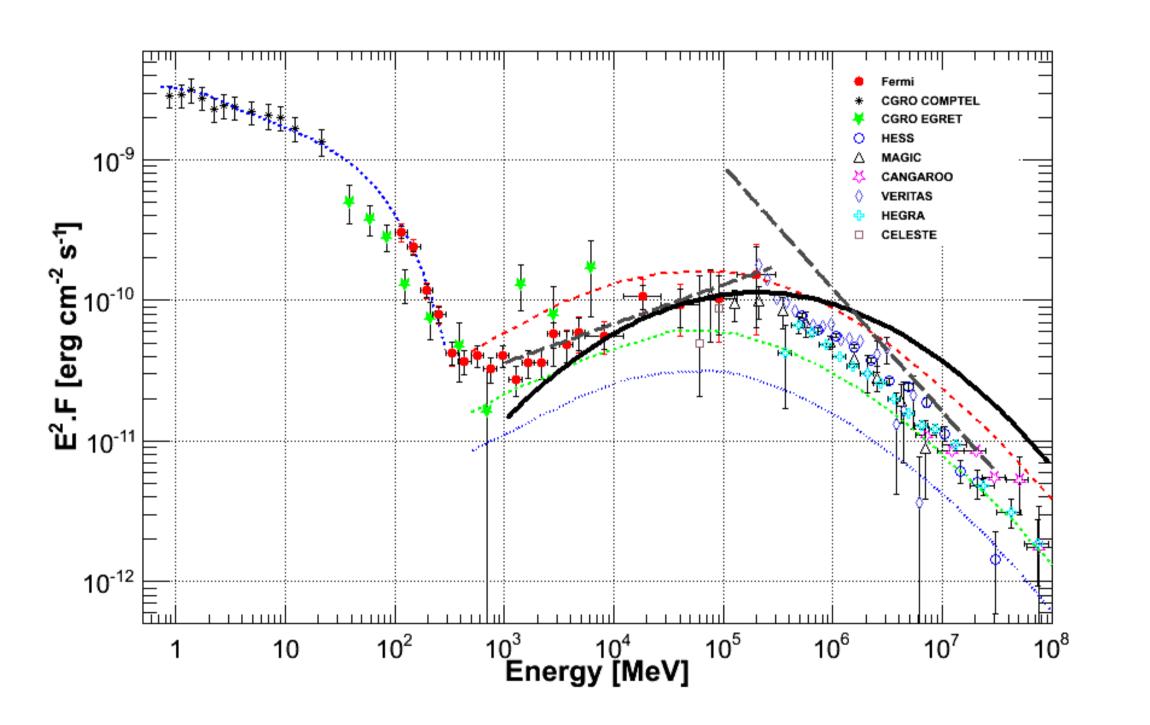
0.9

0.8

CTA acceptance map for gamma-rays using normal pointing.

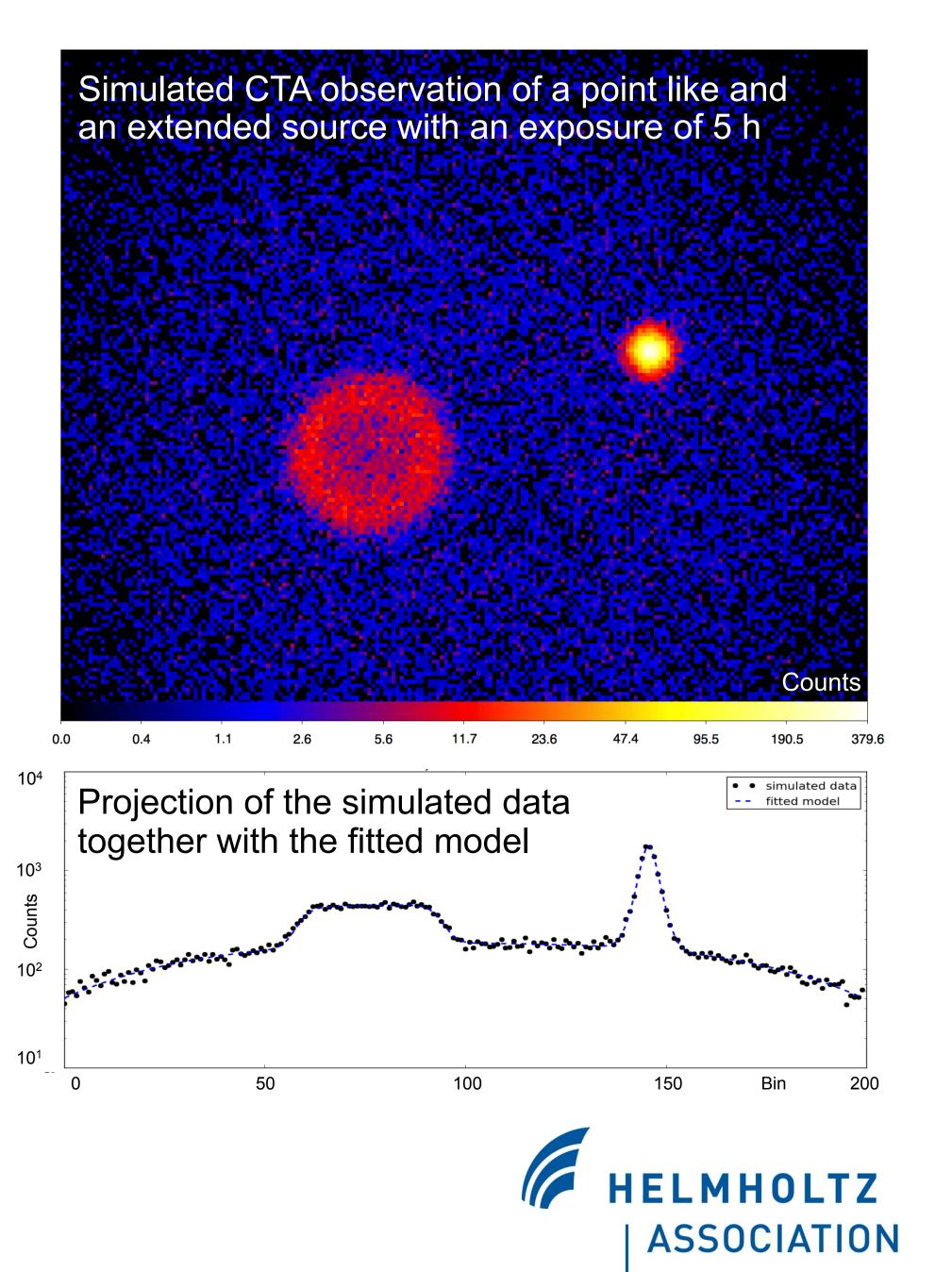
- Simulations for large field of view
- Adaptation of the analysis
- Optimization of the telescopes pointing pattern

A Common Framework for All-Sky Analyses



Key aspects of GammaLib and ctools

 Unifying the analyses of gammaray data



Spectral energy distribution of the Crab Nebula. ctools fit results (solid and dashed black lines) compared to published results

- Simultaneous multi-instrument analysis
- Maximum likelihood model fitting
- Usability for public observatory software
- Ability to simulate CTA data and calculate sensitivities