

The Cherenkov Telescope Array: layout, design and performance



cherenkov
telescope
array

O. Gueta¹

for the CTA Consortium² and CTA Observatory²

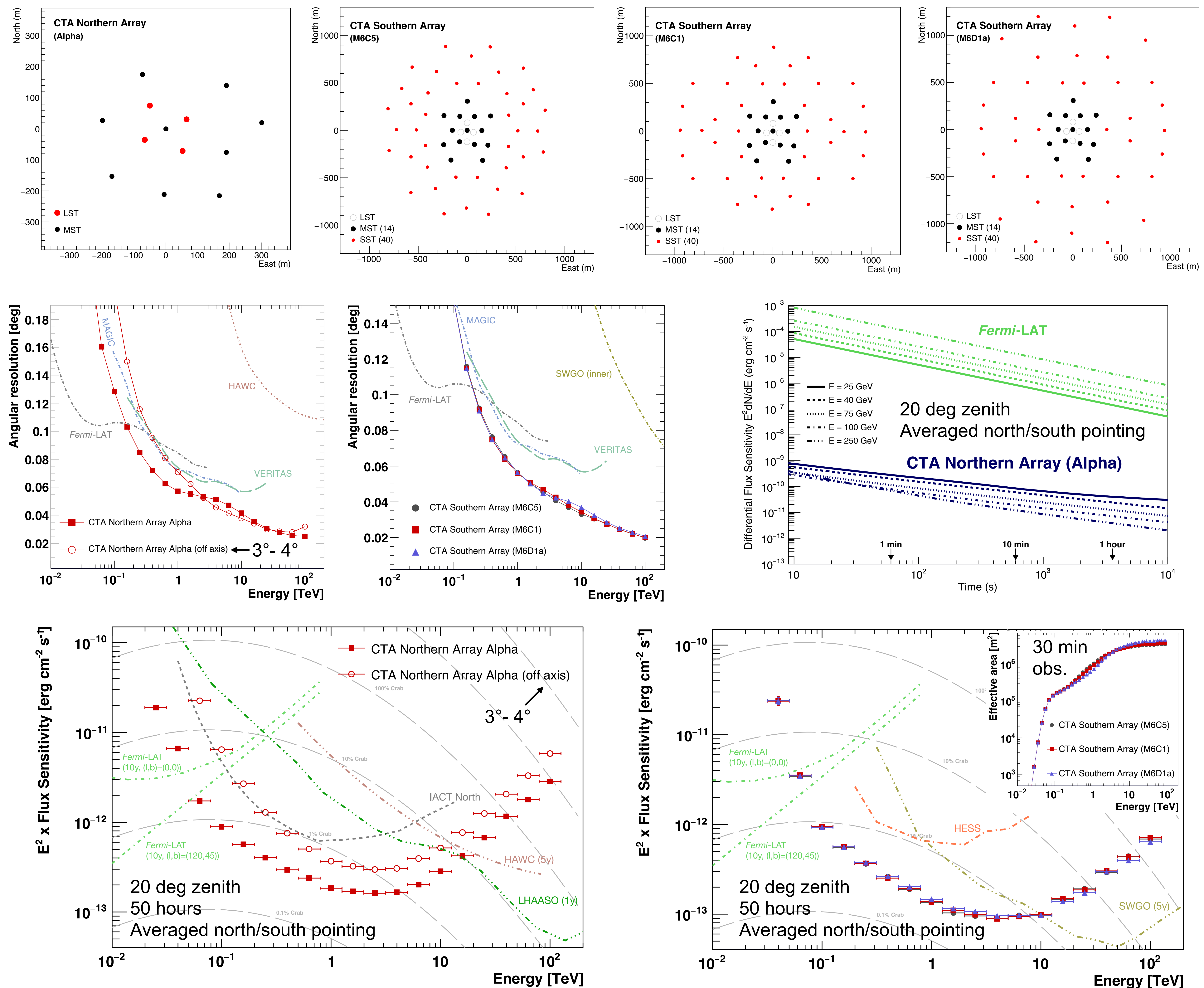
¹Deutsches Elektronen-Synchrotron (DESY), Platanenallee 6, Zeuthen, Germany

²See www.cta-observatory.org

ABSTRACT

The Cherenkov Telescope Array (CTA) will be the next generation very-high-energy gamma-ray observatory. CTA is expected to provide substantial improvement in accuracy and sensitivity with respect to existing instruments thanks to a tenfold increase in the number of telescopes and their state-of-the-art design. Detailed Monte Carlo simulations are used to further optimise the number of telescopes and the array layout, and to estimate the observatory performance using updated models of the selected telescope designs. These studies are presented in this contribution for the two CTA sites located on the island of La Palma (Spain) and near Paranal (Chile) and for different operation and observation conditions.

Supported by:



ACKNOWLEDGEMENTS

We gratefully acknowledge financial support from the agencies and organisations listed here: www.cta-observatory.org/consortium_acknowledgments

www.cta-observatory.org