4th Einstein Telescope Annual Meeting

11-14 November 2025 Opatija, Croatia

Contribution ID: 31 Type: talk

Towards a Sustainable ET Computing Center

Wednesday 12 November 2025 10:25 (15 minutes)

Minimizing environmental impact is essential for the Einstein Telescope, both as a societal responsibility and to meet the expectations of funding agencies. Computing will account for a significant share of operational energy use and is therefore a key focus. We are developing a concept for a climate-neutral ET computing center that uses intelligent workload scheduling to align load with periods of high renewable energy availability, onsite energy production and storage, and waste heat reuse. These measures aim to enable fully climate-neutral operation and extend hardware lifecycles to reduce production impact. To test these concepts in practice, we plan to deploy a transportable, shipping-container-sized prototype.

Authors: STAHL, Achim (RWTH Aachen University); KRISCHER, Stefan (RWTH Aachen University)

Presenter: KRISCHER, Stefan (RWTH Aachen University)
Session Classification: ET e-Infrastructure Board (EIB)

Track Classification: EIB: EIB