

Expanding Horizons — ESO Transforming Astronomy in the 2040s

<https://next.eso.org/>

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SII workshop Waischenfeld
14th October 2025

The next ESO Programme should be identified in **line with [ESO's Vision](#)**. It should deliver a facility that enables **scientific benefits** in a number of areas and serves a **large part** of the astronomical community. Examples include (but are not limited to):

- A new telescope facility at an existing or new observatory site;
- A significant upgrade of an existing facility that is (co-)owned by ESO;
- Other combinations.

Important: ESO does not operate as a funding agency. The design, construction and operation of the new facility will be owned by ESO, either alone or in partnership with other organisations.

Named facilities: VLT, VLTi, ELT, ALMA, CTAO

ESO call for white papers

Deadline 15th December 2025



<https://next.eso.org/call-for-white-papers/>

White papers —> an overview of scientific questions of interest to ESO's astronomical community into 2040s

3 pages plus a cover page

—> *“Each white paper should focus on one (or a group of) science question(s) of interest and explain why this needs a facility we do not expect to have by 2030s.”*

—> less than half a page on technological solutions

Suggest an **optical intensity interferometry white paper**

—> Focus on science cases **beyond** those achievable with CTAO SII
(i.e. science with μ as resolution and/or limiting magnitude ≥ 7 etc...)

Needs community support beyond CTAO members, yet lead authors from ESO member states

Discussion

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