

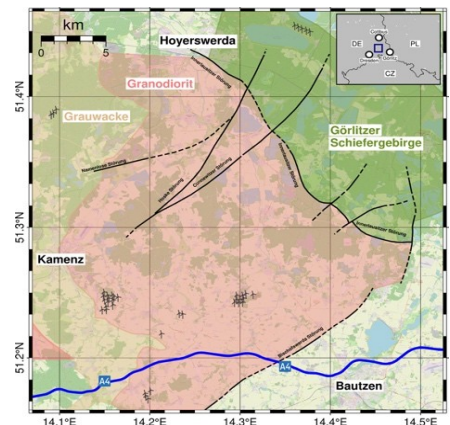
Einstein Telescope

Lausitz

The Einstein Telescope: Europe's top research project of the coming decades

- ☑ The Einstein Telescope is a planned underground next-generation gravitational-wave observatory for studying gravitational waves and thus the origins of the universe.
- ☑ It is one of the most ambitious European research infrastructure projects, of outstanding scientific and technological importance – a project like the Einstein Telescope has never existed before.
- ☑ Three European sites are bidding to host the Einstein Telescope: the Meuse-Rhine Euroregion, Sardinia, and Lusatia.
- ☑ Two design concepts are currently under discussion for the Einstein Telescope: a triangular underground interferometer with 10 km-long sides at a single European site, or two L-shaped underground observatories with two 15 km-long arms each at two cooperating sites.
- ☑ The selection decision will be made at the European level. Participating European countries include: BE, HR, FR, GR, IT, NL, PL, ES, UK, DE, AT, CZ (observer).

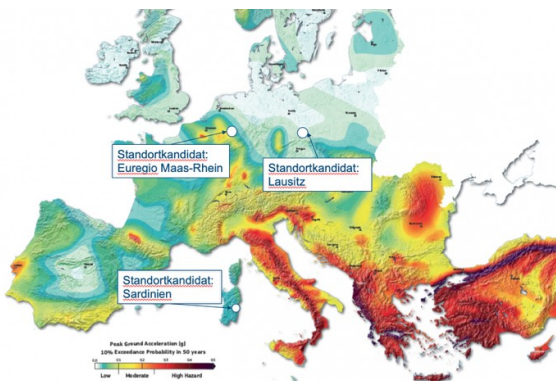
The Free State of Saxony supports the European bid of Lusatia in close partnership with the scientific community and with high strategic priority. The goal is to position the region as an international top location for the Einstein Telescope and to strengthen its role within the European research area. Geological studies of the Lusatian granite bedrock for precise site selection are focused on the district of Bautzen in the area between Bautzen, Kamenz, and Hoyerswerda. They form the scientific basis for a research infrastructure of European scale. Should the Einstein Telescope be realized in a double-L configuration at two European sites, a promising perspective for a partnership between Saxony and Sardinia would emerge. Both regions already signed a cooperation agreement on 12 January 2026, driven by the shared vision of sustainably strengthening Europe's scientific landscape.



Area of the potential site in the district of Bautzen
(Source: TU Dresden)

Strengths of the Lusatia site

- ☑ Unique seismological and geological suitability due to the homogeneous, hard, and water-repellent granite block.
- ☑ Design flexibility, as both the triangular and the double-L configuration are likely to be feasible at the site → a unique selling point of Lusatia compared to other regions.
- ☑ Expected significant cost-benefit advantage compared to other regions.
- ☑ Outstanding scientific expertise and performance of the Saxon research landscape.
- ☑ The only German site with broad scientific and political support perspectives in Germany and Europe.
- ☑ European dimension: potential first major European research infrastructure in Eastern Germany with significant networking potential from West to East (PL, CZ) and from North to South (IT).



Lusatia is one of the most seismically quiet regions in Europe (see map on the left, source: Giardini et al.), and therefore offers excellent geological conditions for the construction of the Einstein Telescope. Previous geological and seismic findings confirm that the region has optimal site conditions and soil properties and could also bring significant cost advantages. A feasibility study launched in January 2026 is now intended to provide a detailed scientific validation of these findings. The study is led by scientists Christian Stegmann and Andreas Rietbrock. This will create the basis for Lusatia to be assessed in a European site selection process according to transparent and comparable scientific and economic criteria – in close partnership with Sardinia and other European partners.