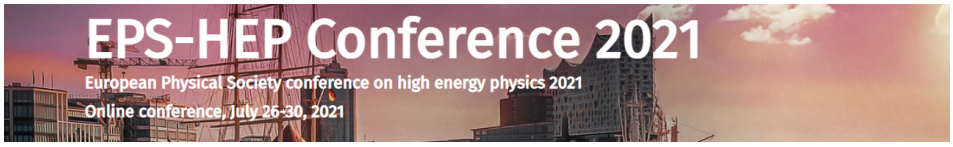


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# Instrument science challenges of the Einstein Telescope

*Monday 26 July 2021 10:40 (20 minutes)*

The Einstein Telescope (ET) is a planned third-generation gravitational wave observatory in Europe. The ET observatory is composed of three detectors that together form an equilateral triangle. Each detector consists of two interferometers, one optimised for low frequencies from 3 Hz to 30 Hz and another optimised for high frequencies from 30 Hz to 10 kHz. In order to reach its ambitious sensitive target ET will require significant technology advances compared to current facilities, from cryogenic suspensions to Newtonian noise subtraction. We have recently started the effort towards the technical design of the detectors and the infrastructure. In this talk I will provide a short overview of the unique challenges and plans of ET instrument science activities.

## First author

Andreas Freise

## Email

a.freise@nihef.nl

## Collaboration / Activity

Einstein Telescope

**Primary author:** FREISE, Andreas (VU Amsterdam and Nikhef)

**Presenter:** FREISE, Andreas (VU Amsterdam and Nikhef)

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