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ET-Pathfinder

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With the discovery and direct measurement of gravitational waves from merging binary black holes and binary neutron stars by the Advanced LIGO and Advanced Virgo detectors a new era of gravitational wave astronomy has begun. Since the current detectors are moving closer to reaching their infrastructural limits, the drive for a third-generation gravitational wave detector increases. The Einstein Telescope (ET) is a proposed gravitational wave detector that will expand the cosmic reach of gravitational wave detection and will allow us to see all merging binary black holes in our universe. In order to research and develop the technologies that will be potentially implemented in ET, a new prototype facility, called ETpathfinder, is currently in its final construction in Maastricht. In this talk (on behalf of the ETpathfinder collaboration) we will present the layout of the prototype facility as well as highlight the initial setting of the cryogenically cooled suspended interferometer. In additionally, we will report on recent progress of the individual subsystems of the ETpathfinder project.

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