

**Plenary Talk**

PV XVII Fri 9:00 HSZ/AUDI

**The Einstein Telescope** — ●HARALD LÜCK — Institut für Gravitationsphysik, Leibniz Universität Hannover und Max-Planck Institut, Hannover

The detections of gravitational waves with the current gravitational wave detectors enabled us to eavesdrop on hidden processes in the universe and obtain information about processes that we cannot see with other methods. They marked the beginning of gravitational as-

tronomy. But we are only at the beginning of this new era. We know how to build new instruments with even better sensitivity that will allow us to listen out into the early times of the universe and constantly register the quiver of spacetime caused by a vast number of sources. With the Einstein Telescope, we want to build such an instrument in Europe. Bigger than before, more sensitive, underground and definitely cool. I will report on the plans and the current state of developments.