Ground-based gravitational-wave observatories
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After decades of development and recent upgrades, a network of ground-based interferometric gravitational-wave detectors has begun regular operation. Last year LIGO’s two detectors ran for ca. 4 months, observing waves emitted during the inspiral and coalescence of pairs of black holes hundreds of megaparsec from Earth. The results from LIGO’s first observational run will be described, as will plans and expectations for a larger network to include Virgo in Europe and other ground-based detectors in the coming years.