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Gravity waves from cosmological first-order phase transitions

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First-order phase transitions proceed by nucleation and expansion of bubbles filled with a new phase of the medium. An example in particle physics is given by the transition in the early Universe from unbroken to broken electroweak gauge symmetry. At the end of the phase transition the expanding bubbles collide and partially release their energy into gravitational wave radiation. I will focus on two aspects of this process:
1) The energy budget using hydrodynamic considerations.
2) The spectrum of the gravity waves given by geometric considerations and computer simulations.

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