Planck 2013
 <h2>From the Planck Scale to the Electroweak Scale</h2>

Contribution ID: 59

Type: not specified

Gravitational waves from the sound of a first-order phase transition

Tuesday 21 May 2013 15:00 (25 minutes)

I will report on the first numerical 3+1D simulation of a thermal first-order phase transition. The simulation includes a scalar field plus a relativistic fluid. We follow the evolution and collisions of the bubbles related to the phase transition. We compute the generated gravita-

tional wave spectrum, and find that their prime source are sound produced by the colliding bubbles.

Presenter: HUBER, Stephan

Session Classification: Parallel Session on Cosmology