

Contribution ID: 149 Type: Talk

Electroweak bubble wall speed limit

Monday, 2 September 2019 17:40 (15 minutes)

In a first order electroweak phase transition bubbles of Higgs phase expand into the symmetric phase. Particles hitting a bubble wall cause friction and slow down the expansion. In some models this can be insufficient to compensate the pressure difference between the two phases. Then the bubble wall would accelerate indefinitely, it would 'run away'. However, particles crossing the bubble wall can emit transition radiation, causing additional friction which prevents runaway.

Primary author: Prof. BODEKER, Dietrich (Bielefeld University)

Presenter: Prof. BODEKER, Dietrich (Bielefeld University)

Session Classification: Parallel Sessions: Early Universe (C.A.R.L., H03)

Track Classification: Early Universe