

## Higgs mechanism and symmetry breaking in strong magnetic field

*Wednesday 2 July 2014 16:15 (30 minutes)*

We discuss the effect of a strong magnetic field in the behavior of the symmetry of an electrically neutral electroweak plasma. We analyze the case of a strong magnetic field and low temperatures as compared with the  $W$  rest energy. If the magnetic field is large enough, it is self-consistently maintained. Charged vector bosons play the most important role, leading only to a decrease of the symmetry breaking parameter, the symmetry restoration not being possible.

**Authors:** RODRIGUEZ QUERTS, Elizabeth (Instituto de Cibernética, Matemática y Física (ICIMAF), La Habana, Cuba); PEREZ ROJAS, Hugo (Instituto de Cibernética, Matemática y Física (ICIMAF), La Habana, Cuba)

**Presenter:** PEREZ ROJAS, Hugo (Instituto de Cibernética, Matemática y Física (ICIMAF), La Habana, Cuba)

**Track Classification:** STARS2013