

ELECTROWEAK BARYOGENESIS CONSTRAINTS ON THE EARLY HISTORY OF THE UNIVERSE

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The observed Baryon Asymmetry of the Universe (BAU) cannot be explained within the Standard Model (SM) of particle physics. However, physics beyond the SM is expected at the electroweak scale and it might contain the ingredients required to explain the BAU via Electroweak Baryogenesis (EWBG). In this talk we review such a baryogenesis mechanism and we highlight some constraints that this framework imposes on early matter-dominated epochs and on primordial magnetic fields generated by the electroweak phase transition. Explicit numerical constraints will be given for EWBG in the Minimal Supersymmetric Standard Model.

Particle
Physics
Seminar

All interested
persons are
cordially
invited to
attend.