

THE PARAMETRIC SPACE
OF THE TWO-HIGGS-DOUBLET MODEL
AND SAKHAROV'S BARYOGENESIS CONDITIONS

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S u m m a r y

The electroweak phase transition in the Two-Higgs-Doublet Model is investigated. The Gibbs potential at a finite temperature is computed with regard for the one-loop plus ring diagram contributions. The strong first-order phase transition satisfying Sakharov's baryogenesis conditions is determined for the values of scalar field masses allowed by experimental data. The relation between the model parameters supplying the phase transition to be of the first order is derived. It is shown that a sequence of phase transitions is also possible. A comparison with results of other authors is done.