



Contribution ID: 99

Type: Oral presentation using Zoom

## Electroweak Baryogenesis in Higgs aligned 2HDM and its prediction at the ILC

*Wednesday, 27 October 2021 10:40 (20 minutes)*

The scenario of electroweak baryogenesis in the CP violating extended Higgs model has been strongly limited by current EDM experiments, hence it is difficult to generate the observed baryon density in our universe. Recently, in the CP violating Two Higgs doublet model, which has the SM like coupling of the 125GeV Higgs and the yukawa sector avoiding FCNC, it was shown that the EDM constraints can be avoided by the destructive interference between two independent additional CP phases. Using this idea, we have calculated the baryon density in this model and found the benchmarks which explain the observed baryon density satisfying the current experimental data. We will show the results and discuss the predictions in the ILC and other future experiments.

### 1st preferred time slot for your oral presentation

15:30-17:30 JST (8:30-10:30 CEST, 2:30-4:30 EDT, 23:30-1:30 PDT)

### 2nd preferred time slot for your oral presentation

19:00-21:00 JST (12:00-14:00 CEST, 6:00-8:00 EDT, 3:00-5:00 PDT)

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**Session Classification:** F&H-1: Higgs properties & BSM particle production

**Track Classification:** Parallel sessions: Topical Groups: Session F: Higgs properties