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## Cornering the Two-Higgs-Doublet II Model

*Thursday, May 27, 2021 2:00 PM (20 minutes)*

We perform a comprehensive study of the allowed parameter space of the Two-Higgs doublet model (2HDM) of type II. Using the theoretical framework flavio, we combine the most recent flavour, collider and electro-weak precision observables with theoretical constraints to obtain bounds on the mass spectrum of the theory. In particular we find that the wrong-sign limit is excluded and potential deviations from the alignment limit can only be small. Finally we test the consequences of our allowed parameter space on electro-weak baryo genesis via the programme package BSMPT.

**Presenter:** BLACK, Matthew (Siegen)

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