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## FOEWPT, THCs and GWs in the 2HDM

*Friday 21 July 2023 14:00 (20 minutes)*

We discuss the interplay of First Order Electroweak Phase Transitions (FOEWPT), Triple Higgs Couplings (THCs) and Gravitational Waves (GWs) in the 2 Higgs Doublet Model (2HDM). We identify six thermal histories in the 2HDM, out of which one leads to a FOEWPT. We discuss the implications for GWs and the measurement of THCs at the HL-LHC and future  $e^+e^-$  colliders, such as the ILC.

**Primary authors:** WEIGLEIN, Georg Ralf (Deutsches Elektronen-Synchrotron (DE)); NO, Jose Miguel (IFT-UAM/CSIC); RADCHENKO SERDULA, Kateryna (DESY); OLEA ROMACHO, Maria Olalla; HEINEMEYER, Sven (CSIC (Madrid, ES)); BIEKOETTER, Thomas

**Presenter:** HEINEMEYER, Sven (CSIC (Madrid, ES))

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