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# Probing light quark Yukawa couplings at the (HL-)LHC

*Wednesday 12 April 2023 16:37 (22 minutes)*

Light quark Yukawa couplings are notoriously difficult to measure: the HL-LHC will be able to constrain the first generation couplings only by a factor of few hundred times their SM value.
I will discuss Higgs pair production and the Higgs off-shell measurement as potential probes of light quark Yukawa couplings. For the Higgs pair production process I will discuss also how interpretable machine learning might be of use for constraining the up and down Yukawa couplings.

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