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Prospects for top-Yukawa coupling and Higgs boson CP at the CLIC e+e- collider

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The compact linear collider - or CLIC - is a proposed electron-positron collider and is currently the only mature option for a multi-TeV linear collider. The CLIC accelerator is based on a novel two-beam acceleration technique at an acceleration gradient of 100 MV/m. It would be built in stages, with three centre-of-mass energies of 380 GeV, 1.5 TeV and 3 TeV. CLIC will make precise measurements of Standard Model processes, including the Higgs boson, and study any new physics processes. In this talk, I will present my studies of $t\bar{t}H$ production at 1.5 TeV, using polarised beams and an integrated luminosity of 2.5/ab. This can be used to measure the precision of the top-Yukawa coupling in the Standard Model to be 2.7% and to investigate the CP properties of the top-Higgs coupling.

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