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Type: **Talk**

## Higgs physics at CLIC

*Saturday 5 September 2020 17:45 (30 minutes)*

The Compact Linear Collider (CLIC) is a mature option for a future electron-positron collider operating at centre-of-mass energies of up to 3 TeV. CLIC is foreseen in a staged approach with three centre-of-mass energy stages currently assumed to be 380 GeV, 1.5 TeV and 3 TeV. This contribution discusses the physics potential of CLIC in the area of Higgs physics based on benchmark analyses using full detector simulation. The initial stage of operation allows study of Higgs production in Higgsstrahlung and WW-fusion, resulting in precise measurements of the production cross sections and the total Higgs-boson decay width. Operation at high energy will provide high-statistics samples of Higgs bosons produced in WW-fusion enabling tight constraints on Higgs couplings and measurement of double Higgs production.

### Is this abstract from experiment?

Yes

### Is the speaker for that presentation defined?

Yes

### Name of experiment and experimental site

CLIC

### Internet talk

Yes

### Details

Nataša Vukašinovic, Vinca Institute, Serbia, nvukasinovic@vinca.rs

**Primary authors:** BRONDOLIN, Erica (CERN); VAN DER KOLK, Naomi (NIKHEF (NL)); VUKASINOVIC, Natasa (Vinca Institute of Nuclear Sciences)

**Presenter:** VUKASINOVIC, Natasa (Vinca Institute of Nuclear Sciences)

**Session Classification:** Plenary