



University
of Victoria

PHYSICS AND ASTRONOMY SEMINAR (Online)

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TRIUMF

“The Cool Copper Collider: An Advanced Concept
for a Future Higgs Factory”

Abstract

“The goal of a next-generation e^+e^- collider is to carry out precision measurements to the percent level of the Higgs boson properties that are not accessible at the LHC and HL-LHC. In this talk we will present the study of a new concept for a high gradient, high power accelerator with beam characteristics suitable to study the Higgs boson, the Cool Copper Collider (C^3), with the goal of minimizing the capital and operating costs. C^3 is based on the latest advances in rf accelerator technology and utilizes optimized cavity geometries, novel rf distribution and operation at cryogenic temperatures to allow the linear accelerator to achieve high accelerating gradients while maintaining overall system efficiency. We will present the latest demonstrated performance of prototype accelerators and highlight the future development path for C^3 ”

Thursday, April 14, 2022

2:00 p.m. PDT

via Zoom:

<https://ubc.zoom.us/j/69420340890?pwd=T1Qyd1Zmckw0Umk5dGdiSUK4K2lTUT09>