ILC Workshop on Potential Experiments (ILCX2021)



Contribution ID: 34

Type: Oral presentation using Zoom

Potential BSM searches in e-e- collisions at ILC.

Thursday, 28 October 2021 16:30 (20 minutes)

Potential physical studies feasible with the ILD experiment operating in the e-e- mode at the ILC collider are discussed. A data sample of about 100 fb-1 collected at the e-e- collisions will allow to search for a few specific processes beyond the Standard model. A high sensitivity can be achieved for the processes proceeding through the t-channel exchange of Majorana neutrino, e-e- \rightarrow W-W-, and the t-channel neutralino exchange with SUSY selectrons in the final state, e-e- \rightarrow e^-e^-. A new method is proposed to search for heavy Higgs bosons in the vector boson fusion processes, e-e- \rightarrow H0 e-e-, e-e- \rightarrow H-e-nu_e, and e-e- \rightarrow H- nu_e nu_e.

1st preferred time slot for your oral presentation

19:00-21:00 JST (12:00-14:00 CEST, 6:00-8:00 EDT, 3:00-5:00 PDT)

2nd preferred time slot for your oral presentation

10:00-12:00 JST (3:00-5:00 CEST, 21:00-23:00 EDT, 18:00-20:00 PDT)

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Session Classification: V: Alternative collider modes

Track Classification: Parallel sessions: Alternative: Session V: Alternative collider modes