



Contribution ID: 30

Type: Oral presentation using Zoom

A high-luminosity SC e+e- collider with energy recovery and multiple use of beams

Thursday, 28 October 2021 13:30 (30 minutes)

A linear e+e- collider with energy recovery (ERLC) is considered. To avoid parasitic collisions inside the linac a twin LC is proposed. The acceleration gradient is 20 GeV/m, $Q=3.10^{10}$. For $2E=250$ GeV, the luminosity is about 5.10^{35} when working with a duty cycle 1/3 and total power $P=130$ MW. With the power about 250 MW, it can work in continuous mode and produce $L=10^{36}$. This is a “green” collider, two orders of magnitude more efficient than the ILC.

1st preferred time slot for your oral presentation

15:30-17:30 JST (8:30-10:30 CEST, 2:30-4:30 EDT, 23:30-1:30 PDT)

2nd 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)

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Session Classification: W-1: Green ILC

Track Classification: Parallel sessions: Sustainability: Session W: Green ILC