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Filling schemes through injector chain

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FCC-ee aims extremely high luminosities during its all operational modes: Z, W, H and top quark. Especially, the Z run steps forward amongst the other stages due to the very high stored charge, i.e. 1.4 A, in the collider. Therefore, the injectors need to provide the collider fill from the scratch as well as maintain the luminosity at the peak thru operation by making use of the quasi-continuous top-up injection. This talk will stress on the operational modes and compare the CDR versus the newly suggested injection filling schemes. The new bunch schedules put forward in order to fill the collider in a shorter time interval and to profit from the injectors at maximum which becomes crucial during the restore of the charge loss due to collisions, scatterings and so on. All in all, we will discuss the pros and cons of the multi-bunch acceleration in an RF pulse of the linac and its impact to the whole FCC-ee complex.

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