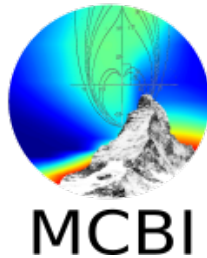


ICFA mini-Workshop on "Mitigation of Coherent Beam Instabilities in particle accelerators" MCBI 2019



Contribution ID: 93

Type: **not specified**

* **Overview of collective effects in SLS 2.0**

Tuesday 24 September 2019 17:30 (10 minutes)

At the end of 2017, the conceptual design for an upgrade of the Swiss Light Source was finished, promising a 50 fold increase of the brilliance from the current value. From the point of view of collective effects, the main changes in the new design are a reduced chamber size, fully coated with NEG, and operation at small and negative momentum compaction with low synchronous frequency. We give an overview of the latest results for the ring. Most critical is the threshold for the longitudinal single bunch current. Taking into account the combined effect of wake impedances and CSR, we have to rely on bunch stretching by a higher harmonic system to arrive at stable operation at nominal current.

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Session Classification: Poster Session