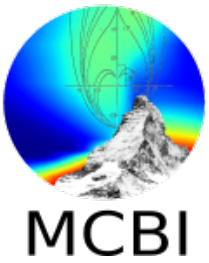

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* Vlasov solvers and simulation code analysis for mode-coupling instabilities in both longitudinal and transverse planes

Tuesday 24 September 2019 18:00 (10 minutes)

Two Vlasov solvers for the longitudinal and transverse planes are used to study the frequency shift of coherent oscillation modes and possible mode-coupling instability in case of a broad-band resonator impedance model. In parallel to this approach, a new method to study the coherent frequency shift from the results of simulation codes is presented. Comparisons between the two methods are discussed, as well as simple analytical formulae, which clearly reveal how to mitigate these instabilities.

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