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## Study of beam-beam interaction in FCC-ee including updated transverse and longitudinal impedances

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Beam-beam interaction in FCC-ee can be seriously affected by the vacuum chamber coupling impedance resulting in a safe tune areas reduction, tune shifts and spread, bunch length and energy spread variation. The interplay of the two effects have a drastic impact on the stability of colliding bunches and respectively on the achievable luminosity. In this paper beam-beam collisions in FCC-ee with 4 interaction points are studied including the updated transverse and longitudinal impedances.

### Funding Agency

### Footnotes

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Yes

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