

IPAC 2018 Abstract

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Title **Study of the azimuthal distribution and polarization of Coherent Smith-Purcell Radiation using FACET E-203 data**

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Abstract Using the setup of the E-203 experiment we have studied several properties of Coherent Smith-Purcell Radiation at the FACET accelerator. The azimuthal distribution of the radiation has been compared with theoretical predictions and we show that for some angles there is a good agreement with the predictions whereas at some other angles the predictions are not so well reproduced. We also report on modifications of the experimental setup to study the polarization of the radiation emitted. We present the degree of polarization measured as function of the angle of observation for different gratings.

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Footnote

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