The Beams and Applications Seminar Series

Angular momentum dominated electron beam and flat beam generation

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Bldg. 401, room B2100 Friday, February 18, 1:30 pm

Host: K.-J. Kim, ASD

Angular momentum dominated electron beam generated by a photoinjector is of interests for various accelerator projects. Such a beam can be used directly in electron cooling of heavy ions, or it can be used to generate a flat beam for either different light source projects or for linear collider. In this talk we report our experimental studies of angular momentum dominated beam at Fermilab, addressing the dependencies of angular momentum on various initial conditions. We also discuss the generation of a flat electron beam using several skew quadrupoles from an incoming round angular momentum dominated beam, and the limiting factors on the flat beam emittance ratio.

For more information visit

http://www.aps.anl.gov/asd/physics/seminar.html

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