THE CARIBU EBIS CHARGE BREEDER DESIGN AND RECENT COMMISSIONING RESULTS

Clay Dickerson

Argonne Physics Division

An electron beam ion source (EBIS) will be installed to charge breed radioactive ions from CARIBU. Electron and ion beam transport simulations were used to characterize the performance of the EBIS and to design a reliable ion beam optics configuration for the injection and extraction beamlines. In addition to the simulation results, recent subsystem commissioning results (the electron gun, the vacuum system, the control system, etc.) will be presented.