

## ANALYSIS OF ELECTRON TRAJECTORIES IN THE TWO-ELECTRODE SYSTEM OF A VACUUM CURRENT BREAKER WITH MAGNETIC CONTROL

The electron trajectories in the pulsed magnetic field between flat electrodes of vacuum circuit (current) breaker are numerically calculated taking into account the secondary magnetic field generated by eddy currents that are magnetically induced in the electrodes. It is revealed that the dimensions of the calculated region affect the calculation results of the edge electron trajectories beyond the inter-electrode gap and the electron cut-off conditions. The results obtained are applied to design vacuum interrupters and low-pressure discharge devices with magnetic control.

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**Track Classification:** Plasma Physics