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【641】Interaction between three fireballs in low temperature plasma

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Plasma Fireballs are luminous, sharply defined, quasi-spherical plasma objects, which ap-pear in the vicinity of a positively biased electrode placed in background plasma, existing in both stable and dynamic states where a periodic expulsion and backflow of ions near the sheath edge is observed generating oscillations in the range of 20 kHz. In this work we present results on the study of the interactions between three independently biased fireballs. The distance between the electrodes, along with the background pressure, af-fects the recorded current oscillations. Comprehensive investigations of the frequency behaviour were carried out for different electrode voltages, at several background pres-sures and variable electrode distances.

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