



Contribution ID: 374

Type: **Poster**

[641] Interaction between three fireballs in low temperature plasma

Tuesday, 31 August 2021 19:12 (1 minute)

Plasma Fireballs are luminous, sharply defined, quasi-spherical plasma objects, which appear 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, affects the recorded current oscillations. Comprehensive investigations of the frequency behaviour were carried out for different electrode voltages, at several background pressures and variable electrode distances.

Primary authors: Dr KONRAD-SOARE, Claudia-Teodora (University of Innsbruck); Dr IONITA-SCHRITTWIESER, Codrina (University of Innsbruck); Prof. DIMITRIU, Dan-Gheorghe (Alexandru Ioan Cuza University); Dr ENESCU, Florin (University of Innsbruck); Prof. SCHRITTWIESER, Roman (University of Innsbruck); Dr IRIMICIUC, Stefan (National Institute for Laser, Plasma and Radiation Physics)

Presenter: Prof. SCHRITTWIESER, Roman (University of Innsbruck)

Session Classification: Poster Session

Track Classification: Applied Physics and Plasma Physics