

R008-14

Zoom meeting D : 11/4 AM2 (10:45-12:30)

11:15~11:30

The impact of oxygen ions on a large scale magnetotail reconnection

#Masao Nakamura¹⁾

¹⁾Dept. of Aerospace Eng., Osaka Prefect. Univ.

The impact of background oxygen ions on a large scale magnetotail reconnection is investigated. After a pair of quasi-steady proton reconnection jets is generated from the proton diffusion region, the oxygen ions remain approximately demagnetized due to their large mass and exhibit Speiser-type motions outside of the proton diffusion region. The oxygen ion motions act as a spatial loading mechanism of mass, momentum and kinetic energy in the oxygen demagnetized region. That mechanism has an influence on the current carriers and the field structure.