



**AAPPS-DPP2020 Invited/Plenary Nomination Form**

**0. Recommender's name, E-mail and affiliation**

Name: Dejin WU

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1. **Session category:** Choose session category **CD**

2. **Type:** Plenary, Invited

Invited

3. **Speaker: Name; Rongsheng Wang**

**E-mail;** rswan@ustc.edu.cn

**Affiliation;** University of Science and Technology of China

4. **Rationale:** Chinese

5. **Short abstract for 5<sup>th</sup> Asia-Pacific Conference on Plasma Physics**

Authors: Rongsheng Wang, Shimou Wang, Quanming LU,

Title: Lower hybrid waves and whistler in magnetic flux ropes during magnetic reconnection

Abstract:

In this talk, I will present the electromagnetic waves inside the flux ropes during magnetic reconnection. The lower hybrid drift waves are confined inside the flux rope and can heat the plasma inside the ropes. They can be excited due to the gradient of the plasma and magnetic field in the edge of the flux ropes. The whistler waves observed inside flux ropes can be classified into two kinds: the high-band and low-band according to their frequency range. The whistler wave can energize the electrons inside the flux ropes. The low-band whistler can be created locally where they are observed due to the anisotropy of electron temperature while the high-band whistler wave can be from far away from the location where they are measured. The waves inside the flux rope can be important for the acceleration of the charged particles.