

## Plasma wave observations in the Mercury magnetosphere by BepiColombo MMO mission

# Hirotsugu Kojima[1], Yoshiharu Omura[1], Hiroshi Matsumoto[1], Satoshi Yagitani[2]

[1] RASC, Kyoto Univ., [2] Kanazawa Univ.

[www.kurasc.kyoto-u.ac.jp/~kojima](http://www.kurasc.kyoto-u.ac.jp/~kojima)

The main target of the BepiColombo MMO mission, which is the collaborative program between the ESA and ISAS, is to investigate the Mercury magnetosphere, which was discovered by the Mariner 10 mission. In order to identify energy exchange processes in the Mercury magnetosphere, it is very important to conduct plasma wave observations. The plasma wave observations by the BepiColombo mission will be the first observation in Mercury, because the Mariner 10 did not carry the plasma wave receivers. In the present paper, we discuss the science objectives of plasma wave observations in the MMO mission and introduce the our proposed plasma wave instrument.