

Development of an ion energy mass spectrometer for MMO

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For an application onboard MMO, we are developing MSA(Mass Spectrum Analyzer) which measures mass discriminated energy spectrum of ions around Mercury. To measure heavy ions (ex. sodium ions) around Mercury, MSA has high mass resolution. MSA also has high time resolution, because the response time of the Mercury's magnetosphere with respect to the solar wind variation is about 10 times faster than that of the Earth's magnetosphere. We will report the design of MSA.