

## Interpretation on slight asymmetry of analyzer characteristics of MIA onboard the Mio by means of a model calculation of 3-D potential distribution

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MIA (Mercury Ion Analyzer) on board Mio employs a top-hat electrostatic analyzer, which has axisymmetric toroidal electrodes and is designed to have no dependence in its characteristics on azimuthal direction of incident ions. However, our ground calibration experiments have revealed that it has a slight dependence. We have tried to explain the dependence by means of three dimensional model calculations. We assume that all parts of electrode are manufactured precisely. Our results show that a slight relative rotation (or tilt) of electrodes can lead to a slight dependence on incident azimuthal direction similar to that obtained from the ground experiments.

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