# Current status of development of MIA (Mercury Ion Analyzer) for BepiColombo

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MIA (Mercury Ion Analyzer) has been developed for measurement of ions in the solar wind and in the Mercury's magnetosphere on board MMO spacecraft. One of the instrumental challenges is in the wide dynamic range of count rates required for measurement of both large ion fluxes in the solar wind and tenuous plasma in the magnetosphere. Another challenge is how to avoid increasing back-ground noise level of the MCP detector by the large solar UV flux near the sun. Massive numerical calculation has been conducted for seeking the optimum design of the instrument. We are now summarizing the results of MIA development for the PDR (Preliminary Design Review) scheduled by the end of the year. We will report the summary of the basic design of MIA in this fall meeting.