



MICROMEGA: a CNES' gravity project in phase0 study

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The concept of “Mini-Constellation of Research Orbiters for Mapping the Earth Gravity Anomalies” (MICROMEGA) was proposed a few years ago by G. Balmino to optimize orbital characteristics of future gravity field missions. Proposed cartwheel or pendulum configurations have been then simulated and evaluated advantageously.

The MICROMEGA proposal has been sustained by a dedicated mission group in France and has obtained support from a broad international community as shown by the French report on “the scientific objectives for a future mission of space gravimetry” presented at the IAG/GGOS meeting on “Towards a Roadmap for Future Satellite Gravity Missions” last Fall in Graz.

Submitted to the CNES' prospective seminar in 2009, the MICROMEGA project has then entered in phase0 study in 2009 in order to identify technical and programmatic aspects of such a mission in terms of mission analysis, payload and satellite platform.

It is to notice that MICROMEGA studies serve as well as basis of the European proposal to the ESA Earth Explorer 8 call for proposals and called E-motion.

We propose to give an overview of this mission project in its present phase0 state.