



Content of radiometric data from a cometary orbiter: Rosetta

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In 2014 the ESA probe Rosetta is to rendezvous with short-period comet 67P/Churyumov-Gerasimenko where it will be inserted in to a stable bound orbit. Partly by measuring the Doppler displacements of the probe's radio carries waves, the gravity field of the comet's nucleus will be found. This project aims to develop navigation strategies, identify important error sources for and feasibility of the gravity field inversion, in particular as a function of the comet outgassing pressure field's stochasticity. Our findings are finally to be tested with the deep space navigation software HELIOSAT, partly developed at ITA. We report on our progress.