

Status of the ACES project

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The ACES project aims at operating ultra stable clocks on board the International Space Station and comparing them to ground clocks located all around the world. The expected performance of ACES space clocks (frequency stability and accuracy at 10^{-16} level) and of the dedicated microwave link (time stability better than 1 ps over 300 s and 10 ps over 1 day) will be of great interest for fundamental physics tests (measurement of the gravitational red-shift, tests of Local Lorentz Invariance, search for a possible drift of fundamental constants).

The development status of ACES instruments and sub-systems (cold atom clock PHARAO, hydrogen maser SHM, microwave link MWL, space clocks phase comparison device FCDP, ...) will be presented at the conference.