



## **Development and Calibration of Space Flight Instruments at the University of Bern**

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Since more than 40 years the division for Space Research and Planetary Sciences of the Physical Institute of the University of Bern develops space flight instruments, such as mass spectrometers, pressure gauges, laser altimeters, and more. Consequently, space flight instruments developed in Bern or with Bernese participation were flown on multiple space missions, for example GEOS, GIOTTO, ULYSSES, SOHO, ROSETTA, and IBEX.

All these instruments need to be tested for functionality upon their different development stages (prototypes and engineering units) and the flight units need to be calibrated. Furthermore, these instruments do also need to be tested for survival regarding vibration, shock and thermal loads. Over the years different facilities have been set up at the Physical Institute of the University of Bern to do such work. This report will present these facilities with special respect to the aspect of calibration.