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***The Attitude Control System on InnoSat - a versatile microsatellite platform developed for Swedish national scientific missions***

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InnoSat is a satellite platform developed for Swedish national scientific missions. The platform is developed to support a range of scientific missions such as atmospheric, astro- and plasma physics, and where an extended configuration also allows for Earth observation and remote sensing missions. InnoSat is funded by the Swedish National Space Agency and OHB Sweden acts as prime contractor for the development of the InnoSat platform, the first flight model for the MATS mission, and for its launch and operations. OHB Sweden works in partnership with ÅAC Microtec who is responsible for the On-Board Computer and the power subsystem.

The InnoSat Attitude Control System (ACS) is developed around an avionics architecture including the On-Board Computer and suite of sensors and actuators for small satellites. The ACS Software is developed in a model based design framework with highly automated testing making use of automatic coding techniques for the generation of the flight application software.

The presentation will focus on the InnoSat ACS design, development and verification. An overview of the on-board software concept as well as the platform in general will also be provided.