



## **RPC and Mirror Mode Waves at Comet 67P/Churyumov-Gerasimenko**

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Mirror mode waves (MMW) are ubiquitous around comets and have been measured at e.g. 1P/Halley and 26P/Grigg-Skjellerup. These waves are generated by local pickup of cometary ions and have a “wavelength” on the order of one or two ion gyro radii. In this presentation we will use the magnetic field and plasma data from the Rosetta Plasma Consortium (RPC) to find MMWs at comet 67P/CG. This investigation will serve two purposes: 1. Investigation of MMWs at a weakly outgassing comet without the presence of a fully developed cometary sheath at a low magnetic field strength and the determination of the species which will participate in the generation of MMWs. 2. Using the magnetic signatures to improve the calibration of the magnetometer data. Knowing the properties of MMWs from theory and earlier measurements, the signatures can be fitted and thereby give inferences for instrument offsets.