Cometary Grain Analysis and the Evolution of the Heliosphere

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Cometary grains have and will be analysed in-situ by space borne as well as laboratory instruments. With the forthcoming encounter of the Rosetta Mission with its target comet 67P/Churyumov-Gerasimenko in 2014, cometary grains will be analysed with the secondary ion mass spectrometer COSIMA in the vicinty of the comet. We will discuss the envisaged cometary grain compostion in view of the past history and evolution due to interaction with the heliospheric gas and plasma in the inner and outer heliosphere.