

## The International Rosetta Mission

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The International Rosetta Mission-the Planetary Cornerstone Mission of the European Space Agency-will study the nucleus of comet 46P/Wirtanen from very close orbits along its trajectory. Starting close to aphelion at the onset of activity and following it through perihelion. The spacecraft will carry a complement of sophisticated remote sensing and in situ analysis instruments and will deploy a lander onto the nucleus' surface. A high resolution mass spectrometer will provide the composition of the volatiles for the mass range of 1 to 500 amu with a mass resolution better than 2000. The composition of the refractories will be determined by a dust mass spectrometer. The Atomic Force Microscope will image grain morphology with nm- resolution. A gas chromatograph-isotope ratio-mass spectrometer is designed to provide all isotopic compositions of H, C, N and O to very high precision. The potential science return of the Rosetta mission and its relevance to bioastronomical research topics will be discussed.