

The Castalia mission to a main belt comet

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We will present our plans for Castalia, a proposed ESA M-class mission to a main belt comet (MBC). MBCs are an important recently identified population, and can provide constraints on formation/evolution of comets, as they have stable orbits within the asteroid belt, but show evidence of containing ice. Castalia will be the first mission to explore this population, providing a direct comparison with Rosetta results. It will rendezvous with MBC 133P/Elst-Pizarro, map its surface, measure its composition (including isotopic ratios), and probe the interior structure of the nucleus.
