

***MarcoPolo-R*: Near Earth Asteroid Sample Return Mission candidate as ESA-M3 class mission**

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Abstract. *MarcoPolo-R* is a sample return mission to a primitive Near-Earth Asteroid (NEA) selected in 2011 for the Assessment Study Phase of M3-class missions in the framework of ESAs Cosmic Vision (CV) 2015-2025 programme. The phase A study started at the end of 2012 and will proceed throughout 2013. The final selection by ESA will occur in February 2014. *MarcoPolo-R* is a European-led mission with a possible contribution from other agencies. *MarcoPolo-R* will rendez-vous with the primitive NEA 2008 EV5. Before returning a unique sample to Earth, the asteroid will be scientifically characterized at multiple scales. *MarcoPolo-R* will provide detailed knowledge of the physical and compositional properties of a member of the population of Potentially Hazardous Asteroids (PHA), which is an important contribution to mitigation studies.

Keywords. celestial mechanics, space vehicles: instruments, minor planets, asteroids.
