

The polarimetric survey of main belt asteroids

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The first results of a polarimetric survey of main belt asteroids at Complejo Astronómico El Leoncito (Casleo), San Juan, Argentina are presented. The aims of this survey are to increase the database of asteroid polarimetry, to estimate diversity in polarimetric properties of asteroids belonging to different taxonomic classes, and to search for objects exhibiting anomalous polarimetric properties, similar to those shown by the asteroid (234) Barbara. The survey began in 2003, and up to 2009 data on a sample of more than 170 asteroids were obtained, most of them are being polarimetrically observed for the first time. Using these data we also find phase-polarization curves and polarimetric parameters for several taxonomic classes.