Thermal Properties of Large Asteroids from Herschel PACS Data

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The SBNAF project (Small Bodies: Near and Far) aims to build a database with infrared observations of asteroids (and also TNOs) from space observatories such as AKARI IRAS WISE Spitzer and Herschel (see Müller et al. 2018AdSpR..62.2326M). IR data can be used to estimate physical and thermal properties from thermo-physical models (TPMs) which is also among SBNAF's objectives. We will present updates on the on-going TPM analysis of a sample 10 large main-belt asteroids –all larger than 100 km in diameter. As input we take published and recently derived shapes from inversion methods, including non-convex SAGE (Bartczak & Dudzinski 2018MNRAS.473.5050B) and/or ADAM (Viikinkoski et al. 2015A&A...576A...8V) models. We discuss the possibility of evaluating shape quality based on the TPM performance in reproducing high-quality data, especially the Herschel PACS fluxes at 70- 100- and 160-micron, but also ground-based and IRAS MSX AKARI and WISE data whenever available.