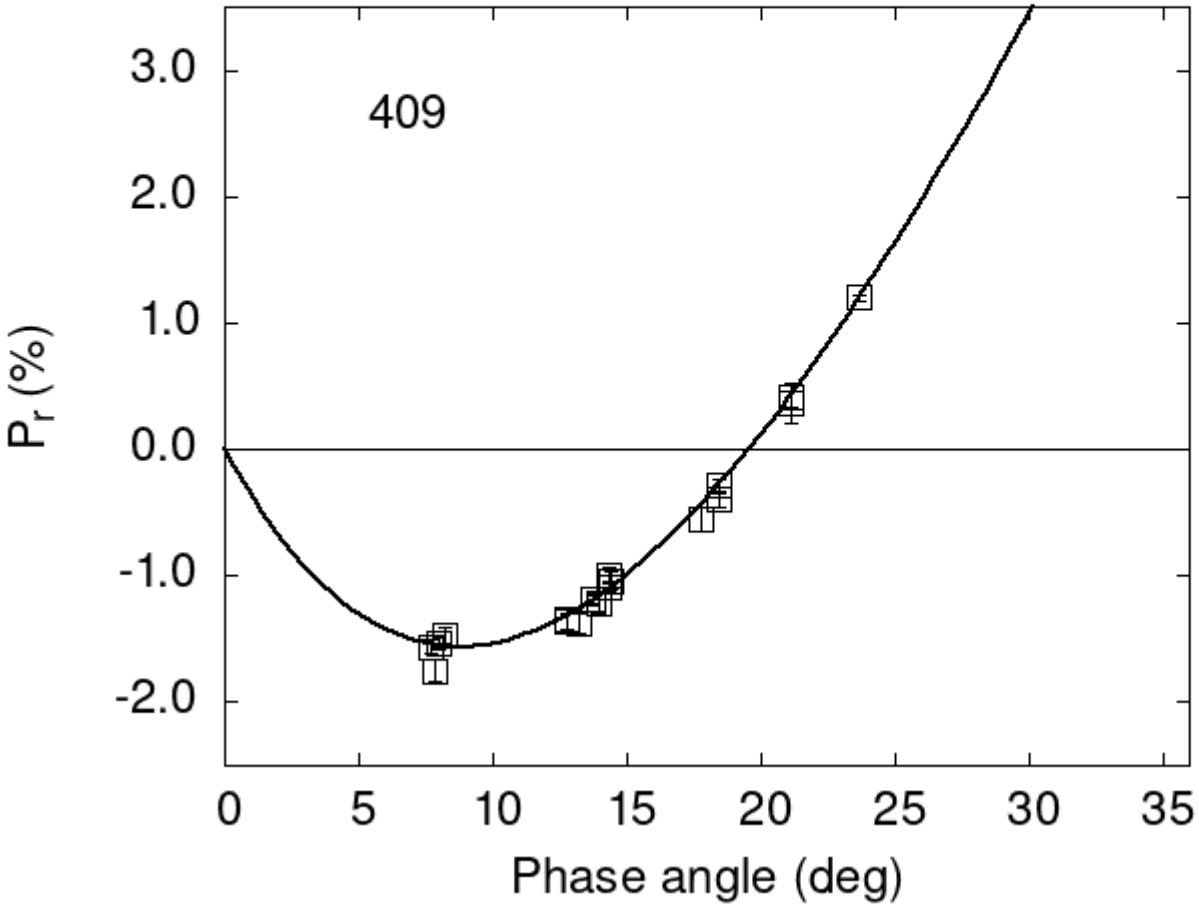
# Catalogue of Asteroid Polarization Curves

Gil-Hutton (2023)




## Polarimetric data:

The columns list the object number, the phase angle (degrees),$P_r$ (%), its error, the filter used, and the reference code.

```
409  7.87 -1.75 0.09 V f
409 13.23 -1.37 0.08 V f
409 13.96 -1.22 0.08 V f
409 17.81 -0.55 0.10 V f
409 21.14  0.42 0.09 V f
409 21.17  0.37 0.16 V f
```

```
409 12.80 -1.35 0.09 V f
409 12.80 -1.36 0.06 R f
409 13.75 -1.19 0.05 V f
409 13.75 -1.18 0.03 R f
409 14.35 -1.09 0.04 V f
409 14.35 -1.00 0.06 R f
409 18.43 -0.39 0.06 V a
409 18.43 -0.29 0.05 R a
409  7.70 -1.56 0.05 V a
409 14.40 -1.04 0.07 V a
409 23.70  1.20 0.02 V a
409  8.20 -1.47 0.07 V a
409  8.00 -1.53 0.05 V a
409 13.75 -1.19 0.05 V b
409 13.75 -1.18 0.03 R b
409 14.35 -1.09 0.05 V b
409 14.35 -1.00 0.06 R b
409 12.80 -1.35 0.09 V b
409 12.80 -1.36 0.06 R b
```

# Polarization Curve Parameters:

The polarimetric parameters were obtained fitting the observations to a polarization curve using the function:

$$P_r(\alpha) = Coe_1 \times \left[\exp\left(-\frac{\alpha}{Coe_2}\right) - 1\right] + Coe_3 \times \alpha,$$

where $\alpha$ is the phase angle in degrees. The minimum of the polarization curve is identified by Pmin, Phmin is the phase angle where Pmin is reached, Ph0 is the inversion angle, and k is the slope of the polarization curve at Ph0.

```
#
#      Coe1    eCoe1     Coe2    eCoe2     Coe3    eCoe3
#   13.9737   0.5035  15.4053   0.4579   0.5135   0.0112
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      8.77  0.68 -1.563  0.274 19.58  0.15 0.2590 0.0146
```