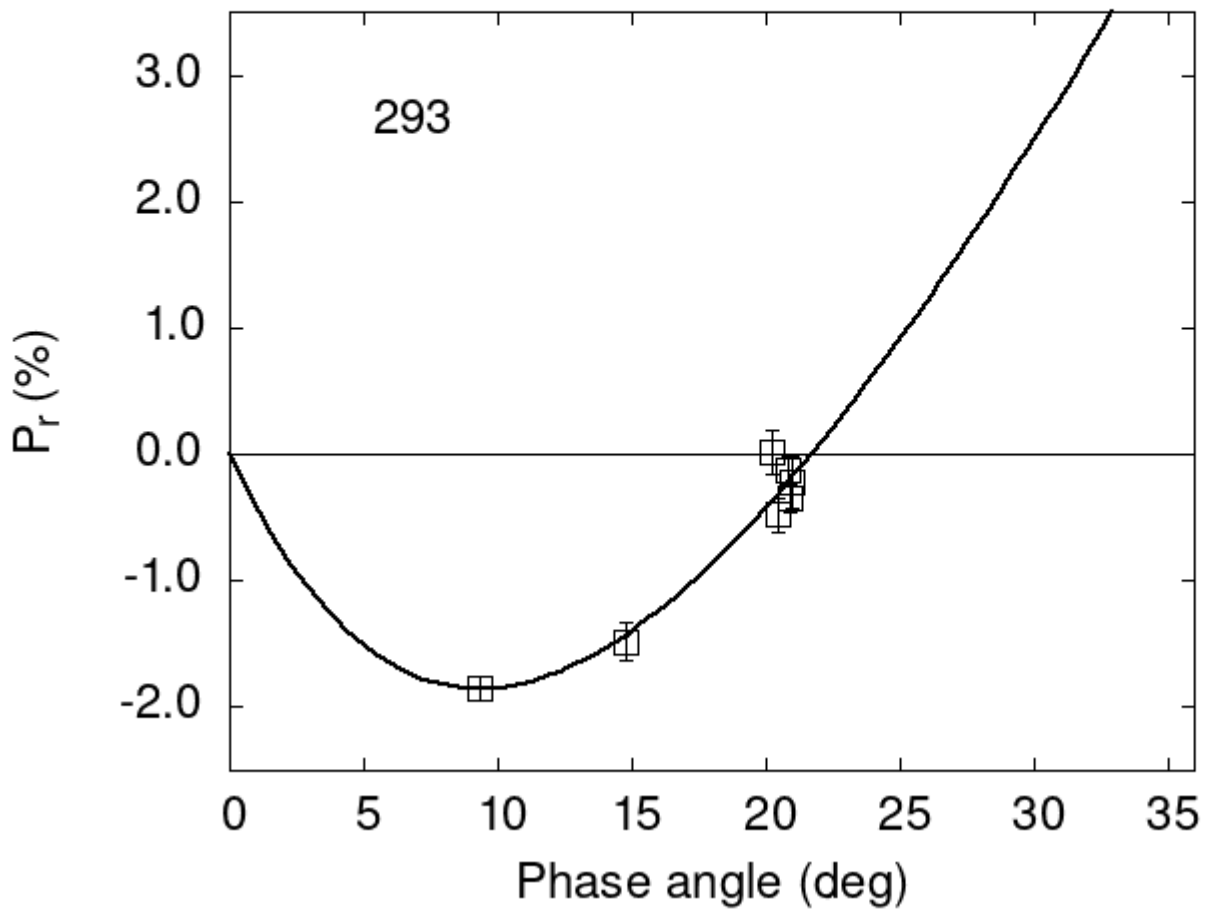# Catalogue of Asteroid Polarization Curves

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.

```
293   9.30 -1.85 0.09 V f
293 14.78 -1.48 0.15 V f
293 20.26  0.02 0.17 V f
293 20.44 -0.48 0.14 V f
293 20.87 -0.13 0.11 V f
293 20.91 -0.34 0.11 V f
```

293 21.01 -0.22 0.20 V f

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 α 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
#    10.9529    0.3828   12.6574    0.6753    0.4134    0.0111
#
#     Phmin    err    Pmin     err  Ph0     err    k       err
#      9.35   0.58  -1.855   0.305 21.73   0.16 0.2579 0.0137
```