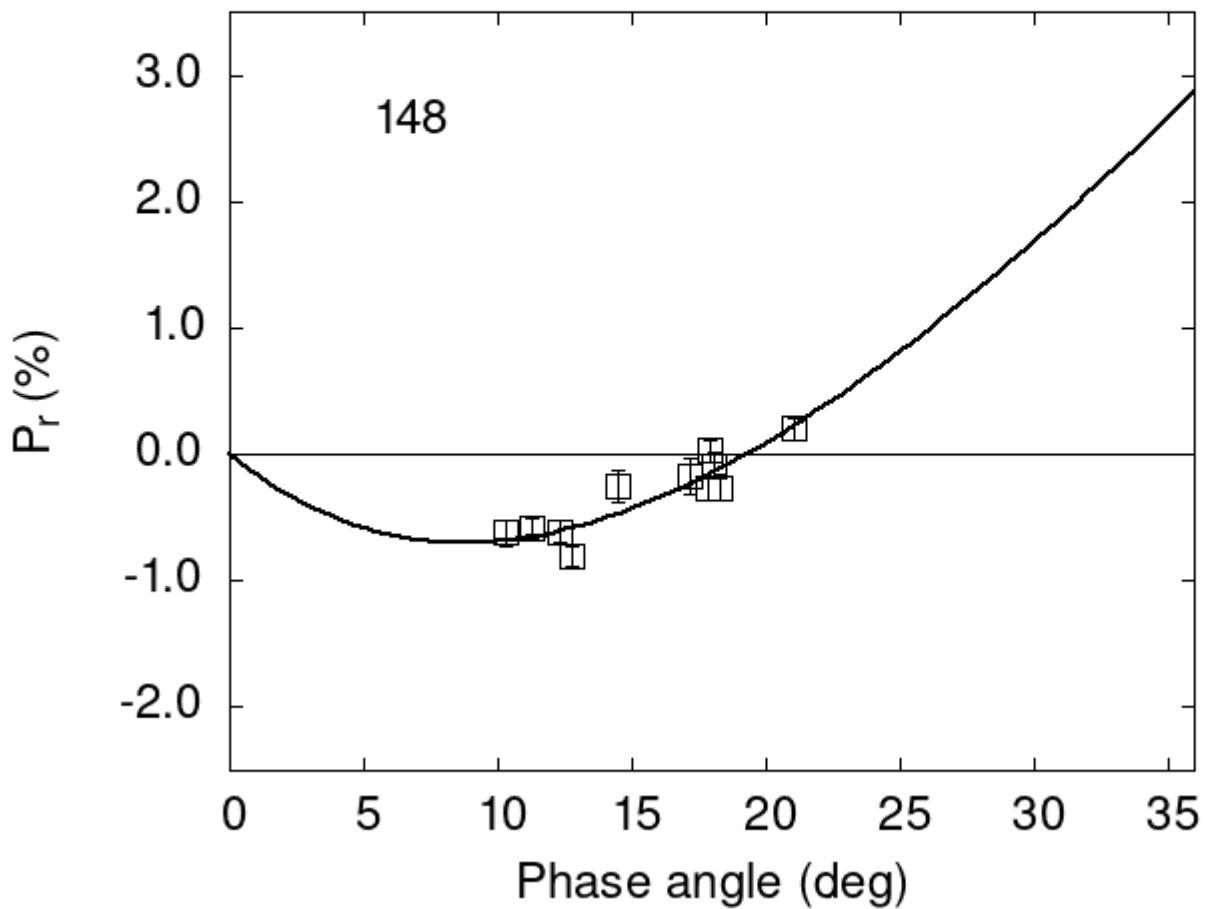# Catalogue of Asteroid Polarization Curves

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.

```
148 10.31 -0.62 0.10 V f
148 11.25 -0.58 0.08 V f
148 12.30 -0.61 0.09 V f
148 12.75 -0.81 0.08 V f
148 14.50 -0.25 0.13 V f
148 17.15 -0.17 0.14 V f
```

```
148 17.88 -0.27 0.09 V f
148 17.89  0.03 0.09 V f
148 18.10 -0.09 0.10 V f
148 18.29 -0.26 0.11 V f
148 21.06  0.20 0.09 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
#   7.4747   0.2917  17.1302   0.8982   0.2617   0.0120
#
#    Phmin   err   Pmin    err  Ph0    err    k       err
#     8.76  1.12  -0.700  0.198 19.30  0.33 0.1203 0.0132
```