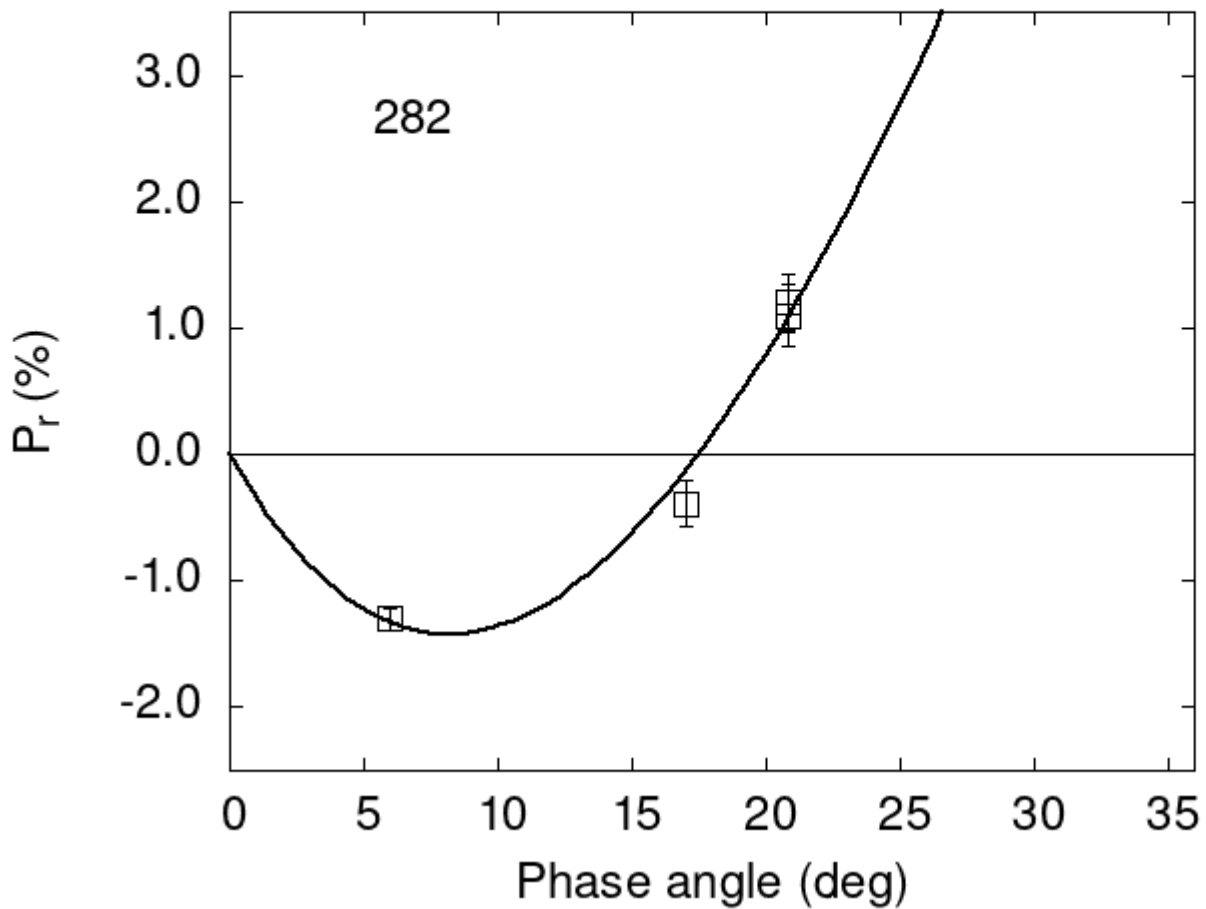# Catalogue of Asteroid Polarization Curves

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.

```
282 20.86   1.20 0.23 V f
282 20.86   1.10 0.25 R f
282 17.00  -0.39 0.18 V a
282 20.86   1.20 0.22 V b
282 20.86   1.10 0.25 R b
282  6.00  -1.30 0.09 V h
```

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
#     25.9201    0.9982   21.7838    0.9440     0.8177     0.0254
#
#      Phmin    err    Pmin      err  Ph0      err    k       err
#       8.17   1.23  -1.425    0.474 17.50   0.14 0.2848  0.0330
```