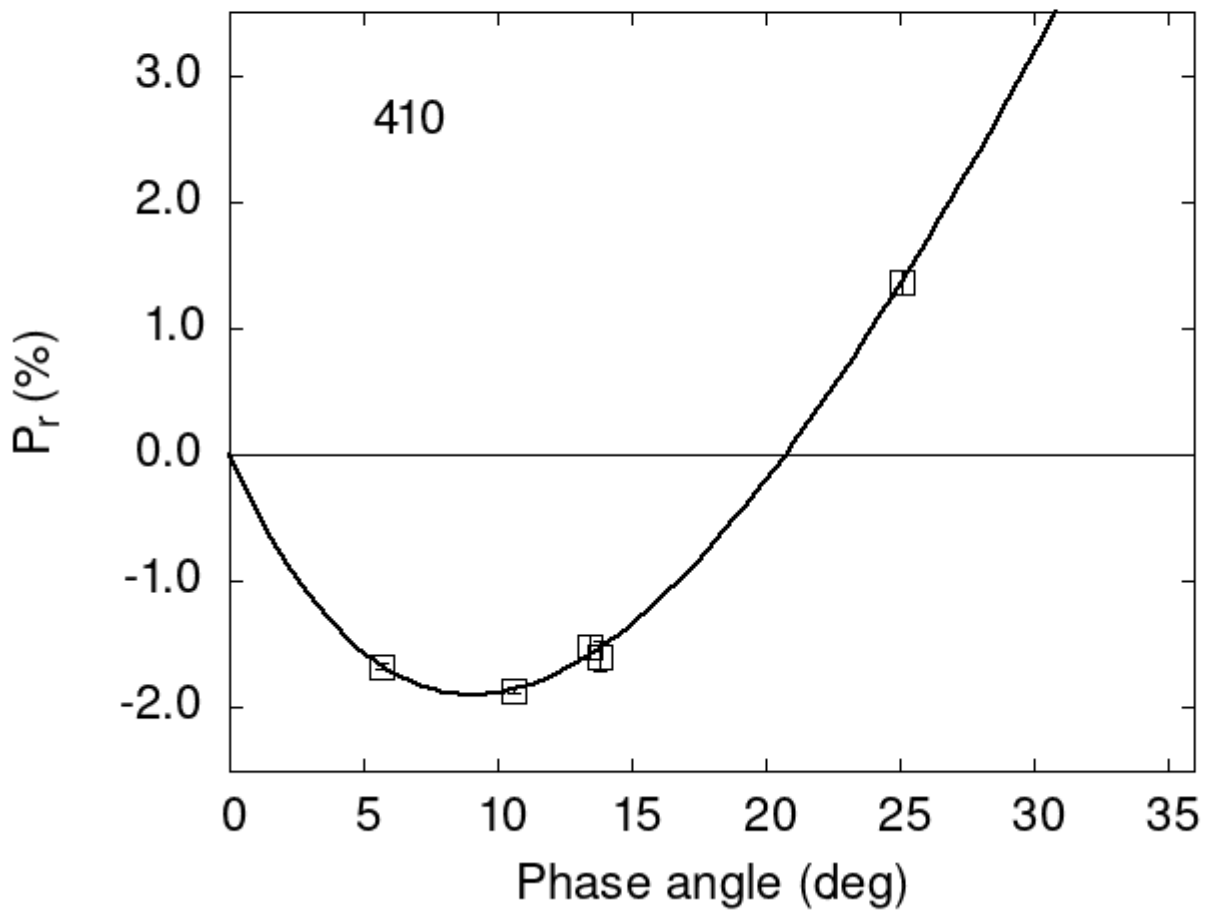# Catalogue of Asteroid Polarization Curves

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.

```
410 13.44 -1.52 0.09 V f
410 13.81 -1.59 0.12 V f
410 25.09  1.36 0.09 V f
410  5.69 -1.67 0.02 G a
410 10.62 -1.86 0.03 G a
```

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
#    12.9368   1.0378   13.4665    0.7610    0.4899    0.0281
#
#     Phmin    err    Pmin     err  Ph0      err    k        err
#      9.07   1.35  -1.897   0.622 20.74   0.14 0.2840 0.0332
```