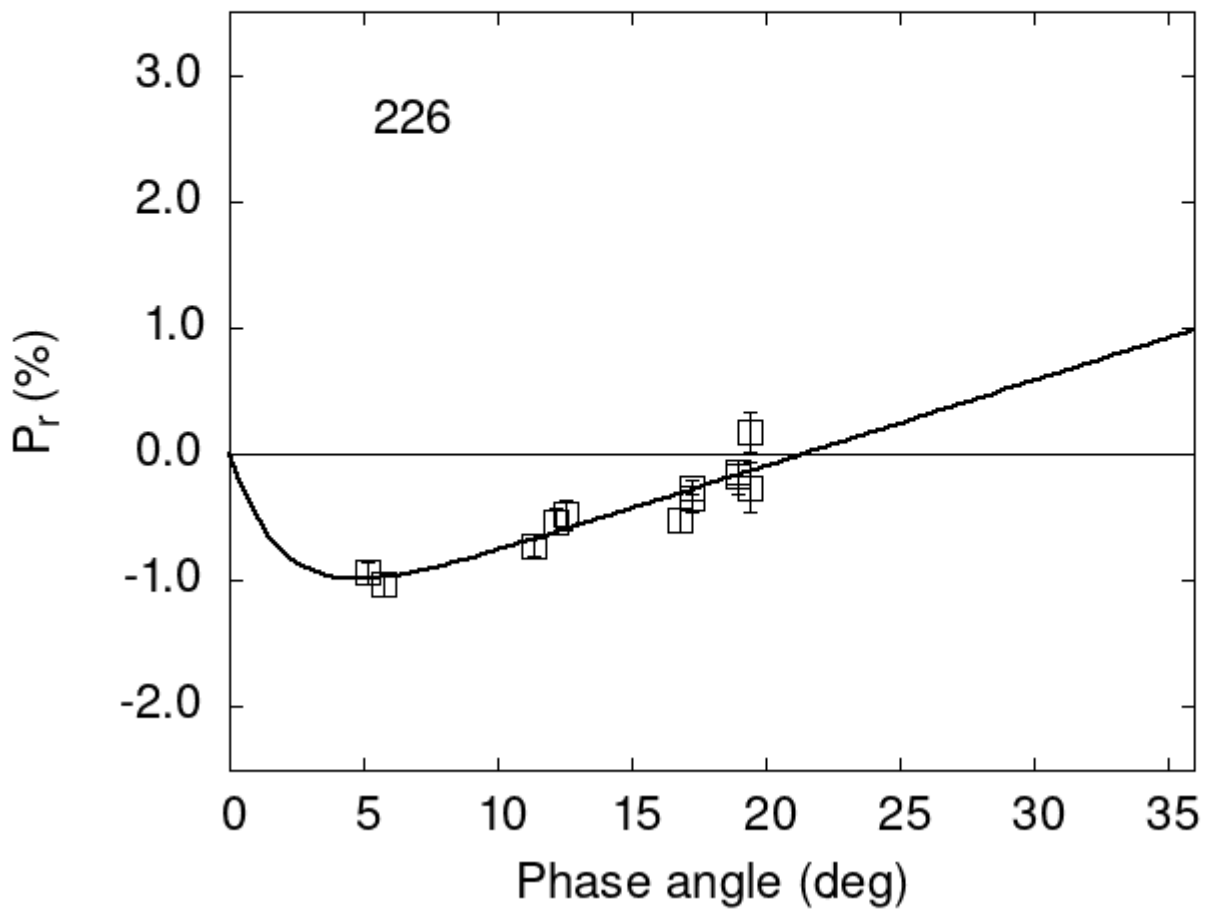# Catalogue of Asteroid Polarization Curves

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.

```
226   5.12 -0.94 0.09 V f
226   5.72 -1.03 0.09 V f
226 11.36 -0.72 0.09 V f
226 12.21 -0.53 0.10 V f
226 12.56 -0.48 0.12 V f
226 16.83 -0.52 0.10 V f
```

```
226 19.43 -0.26 0.20 V a
226 19.43  0.18 0.16 R a
226 17.23 -0.26 0.06 V a
226 17.23 -0.35 0.10 R a
226 18.96 -0.18 0.13 V a
226 18.96 -0.14 0.09 R 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
#    1.4447    0.2179    2.0271    0.9039    0.0674    0.0133
#
#     Phmin    err    Pmin     err   Ph0     err    k       err
#      4.78   1.33  -0.986   0.252 21.42   0.59 0.0674 0.0133
```