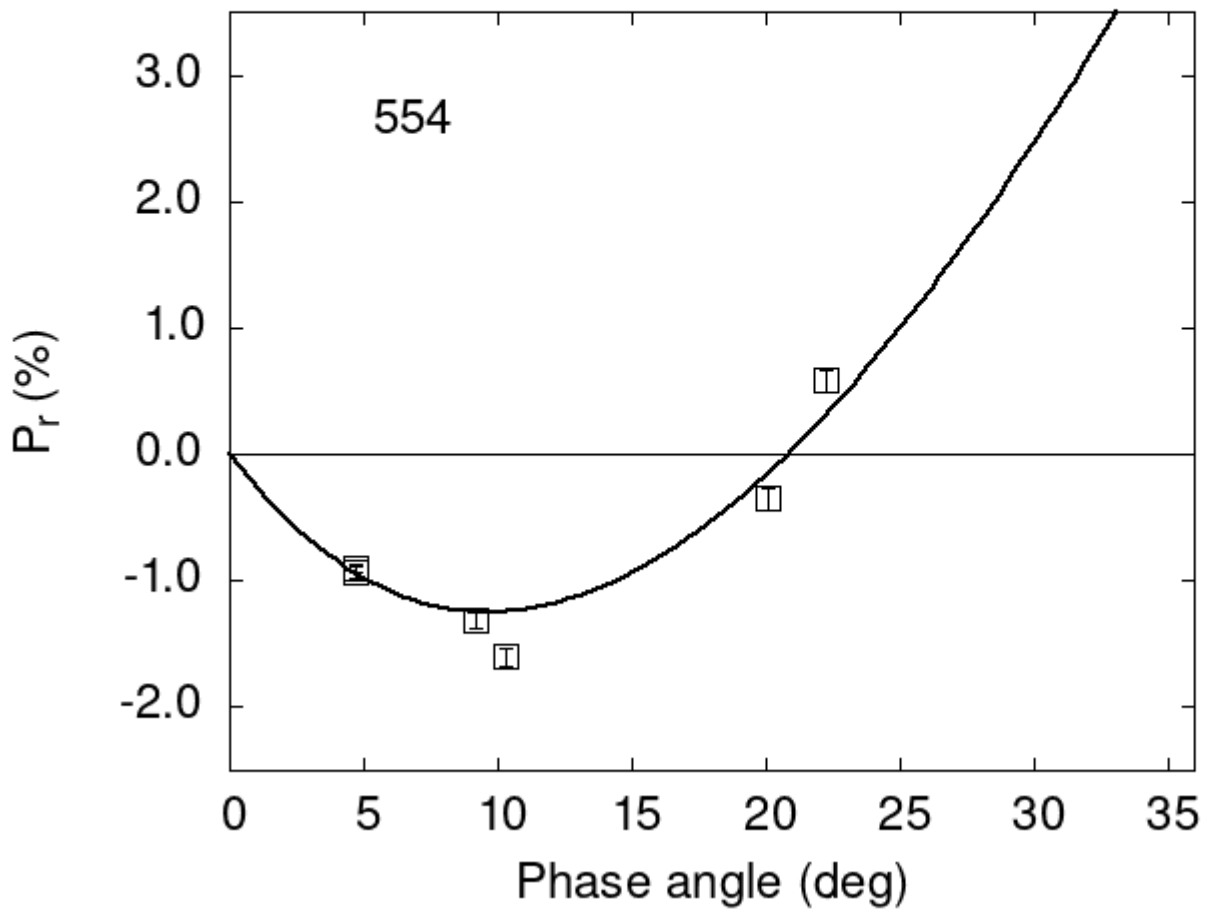# Catalogue of Asteroid Polarization Curves

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.

```
554 20.07 -0.35 0.09 V f
554 22.26  0.58 0.09 V f
554  4.74 -0.93 0.05 V f
554  4.74 -0.90 0.03 R f
554  9.20 -1.31 0.06 V a
554 10.30 -1.60 0.07 V a
```

```
554   4.74 -0.93 0.05 V b
554   4.74 -0.90 0.03 R b
```

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
#   20.2691    0.8632  24.1656    0.6544    0.5620    0.0173
#
#     Phmin    err    Pmin     err   Ph0     err     k       err
#      9.68   1.33  -1.250   0.362 20.83   0.19 0.2078  0.0230
```