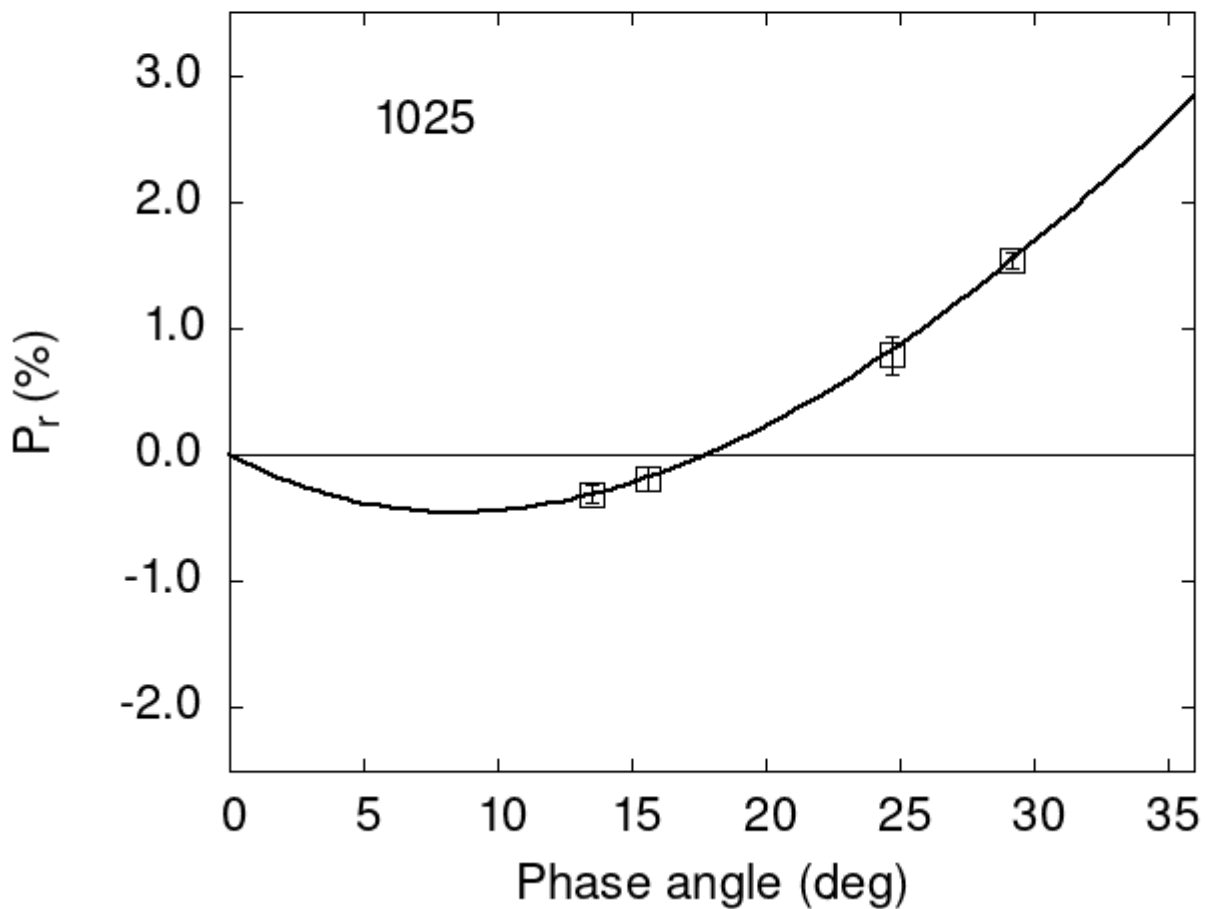# Catalogue of Asteroid Polarization Curves

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.

```
1025 13.50 -0.31 0.07 V a
1025 29.20  1.54 0.06 V a
1025 24.70  0.79 0.15 V a
1025 15.60 -0.19 0.10 V 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 $\alpha$ 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
#    13.3089    0.5246   29.3938    1.5481    0.3396    0.0093
#
#     Phmin    err    Pmin      err   Ph0      err    k        err
#      8.45   1.79  -0.455   0.215 17.80   0.43 0.0925 0.0144
```