**GRÁFICOS**

if graph is True:

def MODEL(x, H, G):

y = H - 2.5 \* np.log10(

(1 - G) \* np.exp(-3.33 \* np.tan(x / 2) \*\* 0.63)

+ G \* np.exp(-1.87 \* np.tan(x / 2) \*\* 1.22)

)

return y

modely = MODEL(alfa\_fit, H, G)

plt.figure()

plt.title("Asteroid " + str(nro))

plt.plot(alfa\_list, modely, "--", color="black", label="H,G")

plt.plot(

alfa\_list,

V\_list,

linestyle="none",

marker="o",

markersize=5,

label="Gaia observations",

color="blue",

)

plt.xlabel("phase angle $\phi$ (deg) ", fontsize=15)

plt.xticks(fontsize=12)

plt.ylabel("V($\phi$)", fontsize=12)

plt.yticks(fontsize=12)

plt.gca().invert\_yaxis()

plt.legend(fontsize=12)

plt.legend()

plt.show()

# plt.savefig('asteroid'+str(nro)+'.png')