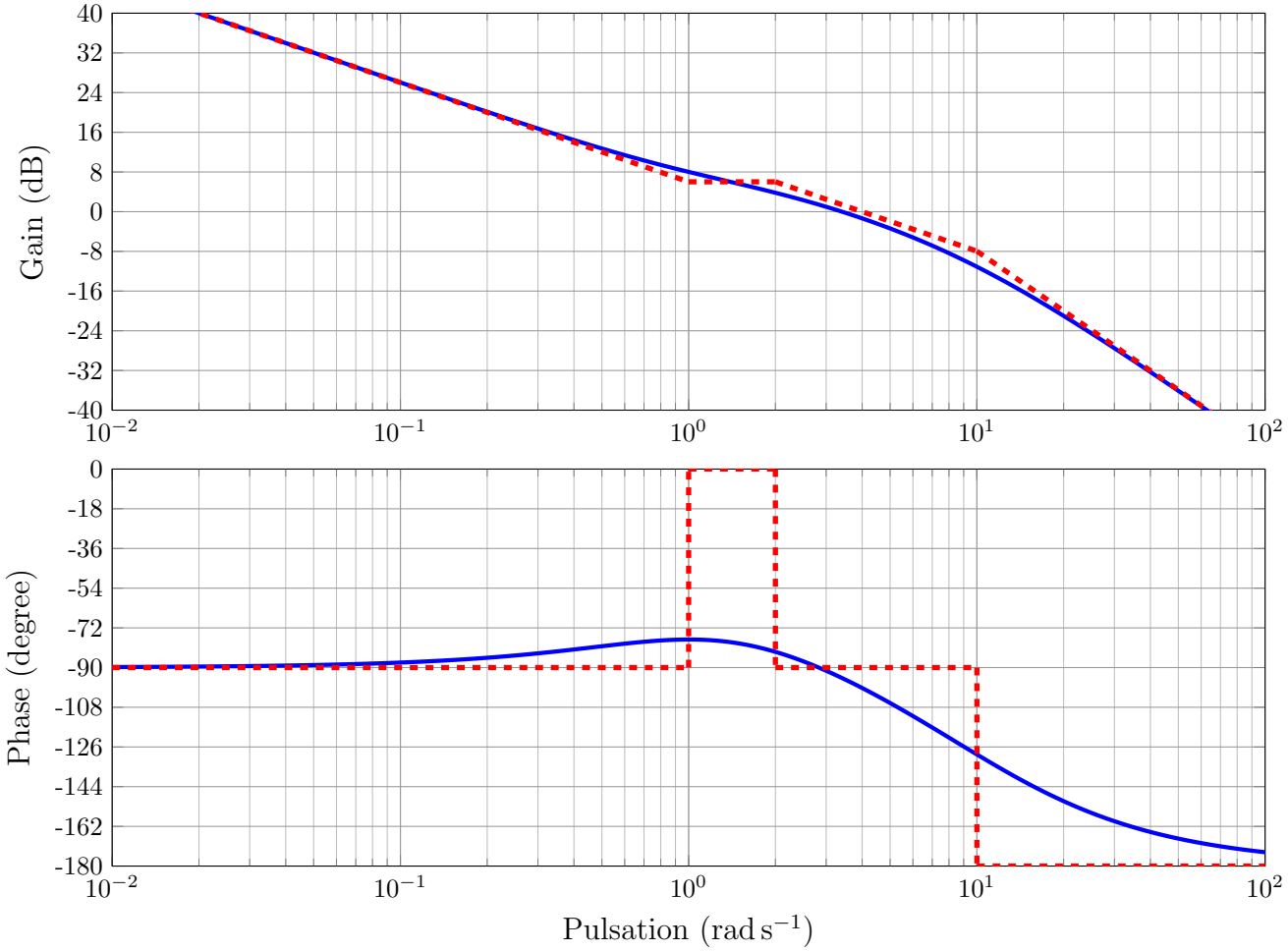
$$\boldsymbol{H(p) = 2\frac{p+1}{0.05p^3 + 0.6p^2 + p}}$$



Fonctions réelles du gain et du déphasage

$$G(\omega) = |H(j\omega)| = \frac{40\,(j\omega + 1)}{-\frac{j\omega^3}{20} - \frac{3\omega^2}{5} + j\omega}$$

$$G_{dB}(\omega) = 32 + 10\log\left(1 + \left(\frac{\omega}{\omega_1}\right)^2\right) + 20\log\omega - 10\log\left(1 + \left(\frac{\omega}{\omega_2}\right)^2\right) - 10\log\left(1 + \left(\frac{\omega}{\omega_3}\right)^2\right)$$

$$\phi(\omega) = \arg H(j\omega) = -90 + \arctan\left(\frac{\omega}{\omega_1}\right) - \arctan\left(\frac{\omega}{\omega_2}\right) - \arctan\left(\frac{\omega}{\omega_3}\right)$$

Quelques valeurs particulières calculées

ω (rad s^{-1})	Gain (dB)	Phase (°)
0.01000	46.02092	-89.77083
0.02512	38.02258	-89.42458
0.06310	30.03333	-88.55813
0.15849	22.10008	-86.43306
0.39811	14.48389	-81.82971
1.00000	**8.01859**	**-77.27564**
2.00000	**3.80907**	**-82.87498**
2.51189	2.28199	-87.28087
6.30957	-5.72227	-113.66853
10.00000	**-11.09622**	**-129.40066**
15.84893	-17.46556	-144.16793
39.81072	-32.23273	-164.46259
100.00000	-48.00332	-173.71658