The data in file damped\_oscillation.txt is shows the position of a magnetic rotor in a fixed magnetic field. One model for the behavior of this rotor would be “exponentially-damped oscillation”,

θ=θo e−βt cos(ωt+ϕ)

Find the resonant frequency ω and the damping constant β for this apparatus. You may assume the uncertainty in position is negligible.

*Hint: Your initial guesses need to be in the right ballpark!*