

HW assignment 7. Due Thu March 24 at 4 p.m. in my mailbox .

A particle of mass m and charge q is constrained to move along a frictionless circular wire of radius R located in the vertical plane. Another charge q is attached to the lowest point of the wire. The system is in the gravitational field with gravitational acceleration g pointing downwards. Find:

- The Lagrangian
- Equilibrium position
- Frequency of small oscillations around the equilibrium.

