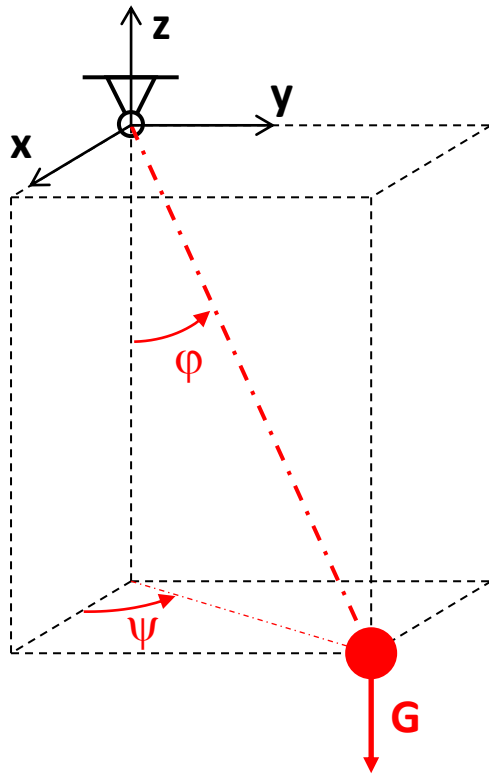


Example 1:

Prepare dynamic simulation model of the pendulum

- with fixed position of the hanging,
- with movable position of the hanging.



Instructions:

- make a free body diagram
- describe the pendulum position in the defined coordinate system
- write down Newton equations
- arrange equations to a linear form with respect to angular accelerations and reaction in the rope
- prepare program code in Matlab (i.e. solve the set of linear equations and integrate results)