

Project Plan (2023/12/15-2023/1/31)

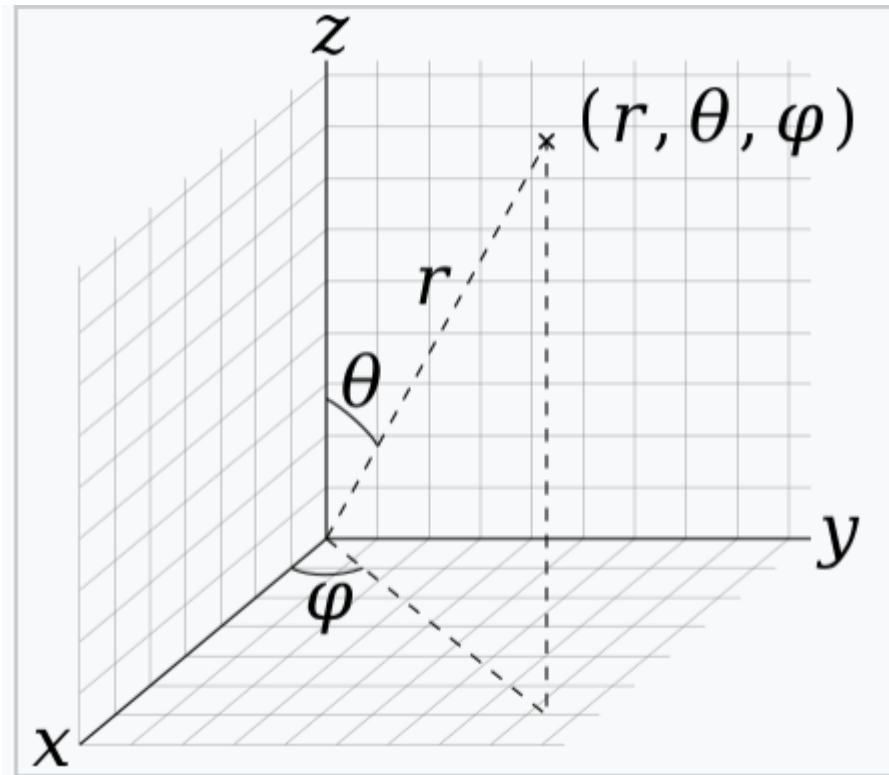
Main Target: construct 3D model simulator with no constraint

[!NOTE]

ps: no constraint means the rods only affect by gravity and external torque induced by magnetic field and don't consider vessel wall at all

Sub-Targets

- ☐ Investigate python packages or softwares that can visualize 3D data which generated by PyElastica (Deadline 12/22)
- ☐ Investigate the control methods used in industry.(Deadline 12/22)
- ☐ Extend M_rod_actuator_electromagnet.py from 2D to 3D, notice that now there are two angles to rotate. They are polar angle θ , azimuth angle ϕ (Plz follow the notation).



- ☐ Collect data from Ansys (Deadline 12/22)
- ☐ Extend uniform magnetic fields to blocks of uniform magnetic fields and update to our 3D simulator.