

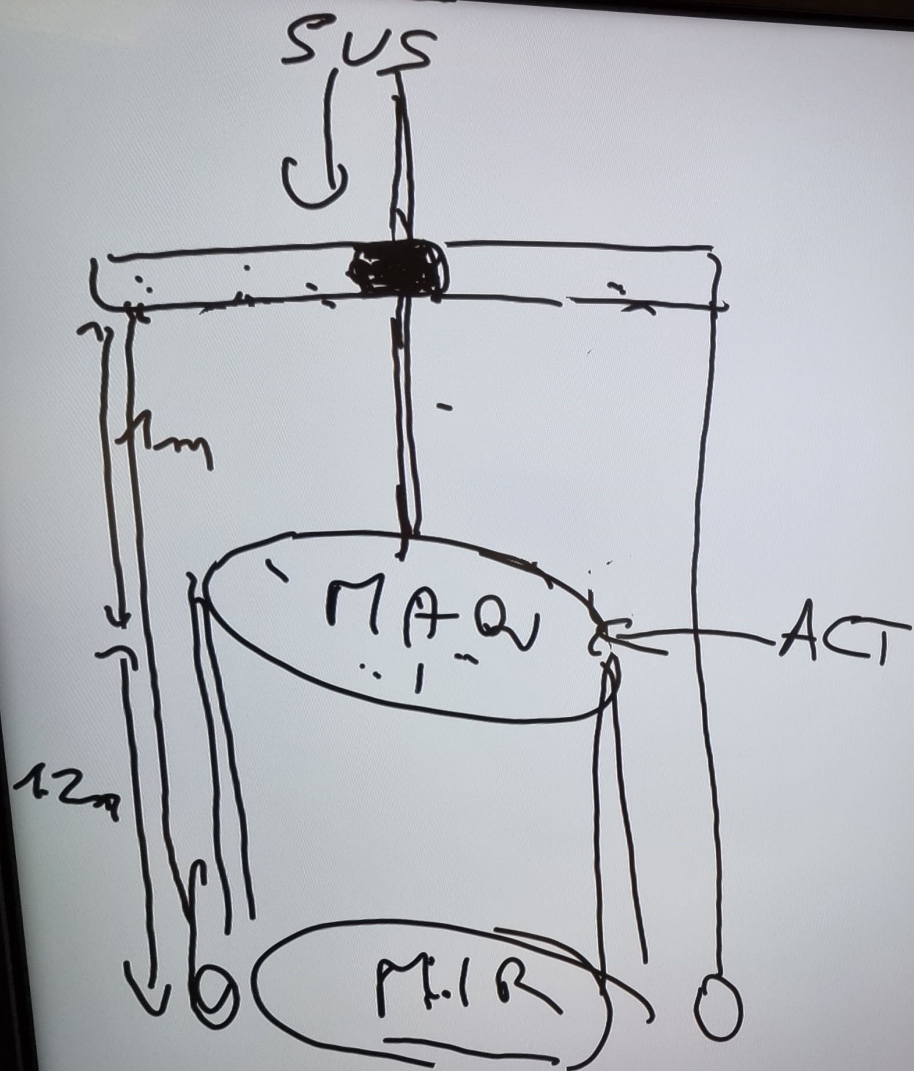
# ANM<>SUS Parallel Session

## 1st session

- SpicyPy: versatile tool for controls simulation with new features always being reviewed (Artem Basalaev)
- E-TEST suspension design: discussion of important design criteria of an actively isolated platform and control scheme (Ameer Sider)
- Finesse: now also a quite complete, variable simulation tool of linear control systems (Riccardo Maggiore)
- Lightsaber: full nonlinear simulation tool in time domain, not straight-forward to set up simulation of new plant model (Tomislav Andric)

## 2<sup>nd</sup> session

- Understand the current models of ET-LF/HF payload & final suspension stages
- Collect parameter values for a mechanical response model, of sensing noises, of arm-cavity configuration



- 1) SUS MODEL
- 2) SENSORS
- 3) RMS REQ
- 4) OPTOMECHANICS

Understand actuation in Virgo

Identify differences to the proposed ET suspensions/payload

What is the ET-LF noise inputs from cryogenics?

# ANM<>SUS Parallel Session

## **3<sup>rd</sup> session**

- Estimate rms requirement for angular motion of ET-LF/HF test masses.
- Put together numerical models of the mechanical responses (zpk, state space,...)

## **4<sup>th</sup> session**

- Run simulations with different simulation tools.