**-MSPM Seminar notes**

* Can put in negative values for body thickness to go in negative direction (inwards/downwards)
* Model piston always at lowest position
* Group-position-theta: can rotate a group or entire model.NO effect on results, only visual
* Forces pointing away from driveshaft are considered positive.
* U= positive direction of motion aligned with positive direction of mechanism (something along this line)
* Discretization function for Matrices: Smart Discretize in AXIAL direction, choose divides > 1 in axial direction
* ‘Ghosts’ radio button shows extreme points of motions
* Environment must always be STATIC (not moving). 🡪 no moving body should be in contact with environment
* Sensors: Xaxis/yaxis is data along line, others are at one point
* Run settings: End condition empty means run to max time.
* During run: ‘Jump’ in PV diagram is the pressure residual. If the jump get smaller it is converging.
* BLUE plot is positive cycle, red is negative
* SnapShot = Initial conditions. Can be used even if geometry changed.
* Relations: Are critical to constrain DoF for optimizations!
  + Lower 2 need chain of at least four
  + ‘Cross section maintaining’ keeps Y-cross section (as viewed from above)
  + After placing a Relation, always unclick Relation
  + Can view Relations as colored connections. Each group of connections has one color.
* Start Optimization:
  + Select connection to be DoF
  + ‘Switch Dropdown’
* Run test set:
  + Copy model name
  + Edit a script from ‘Test\_running’ folder (e.g. ExtremeTests.m)
  + Define struct with parameters for each test
  + Title has to be unique for each run!