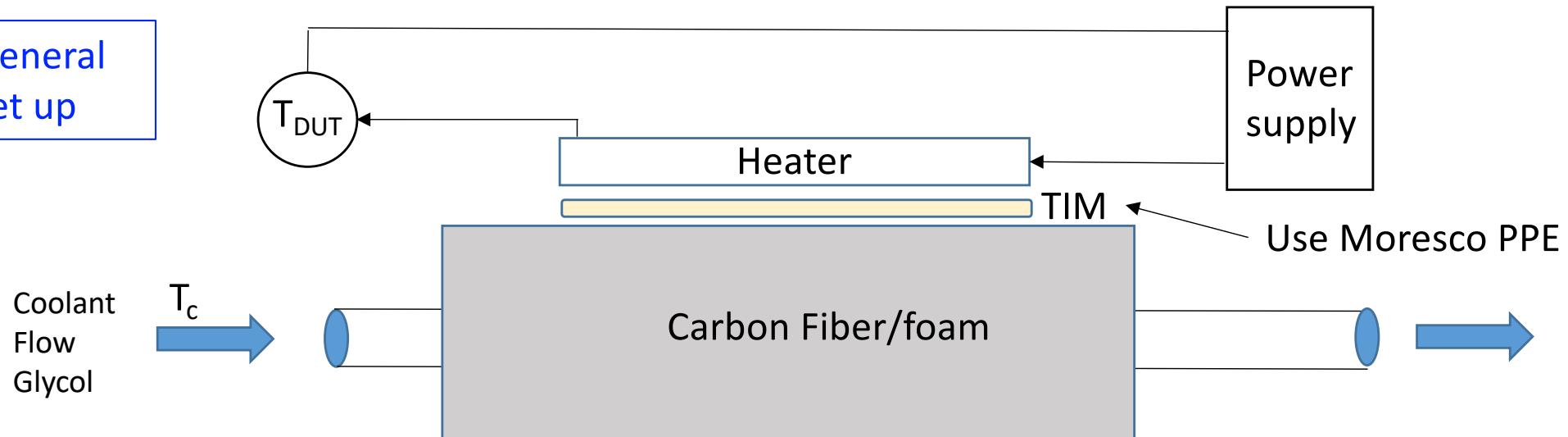
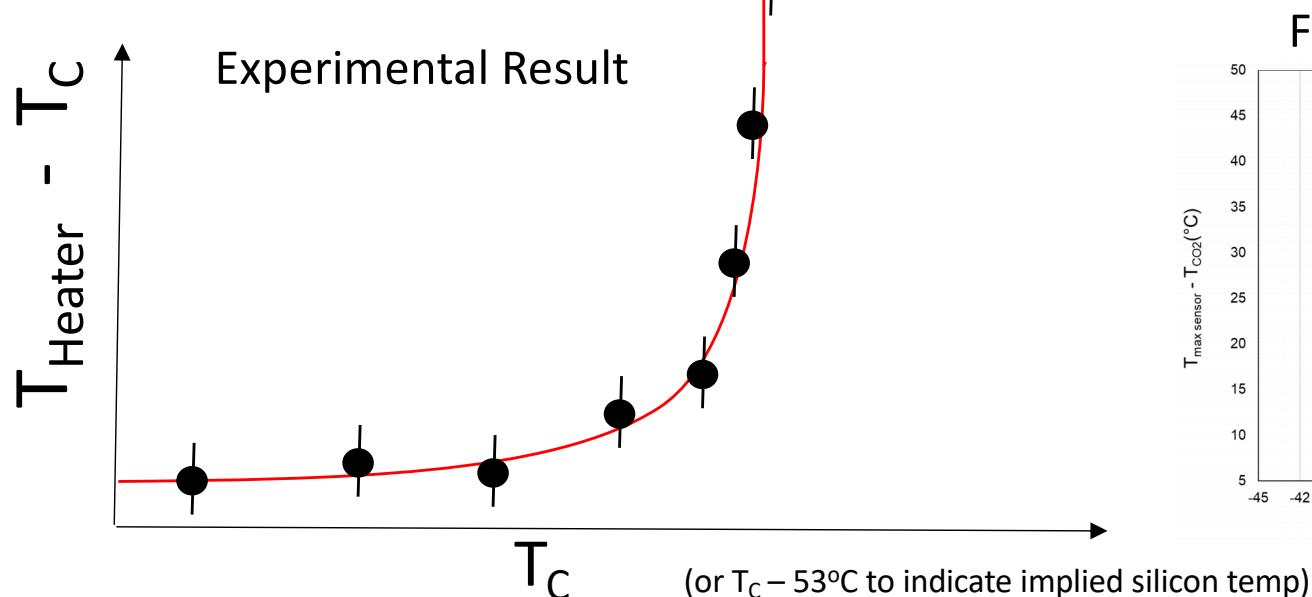


# Strategy for runaway demo

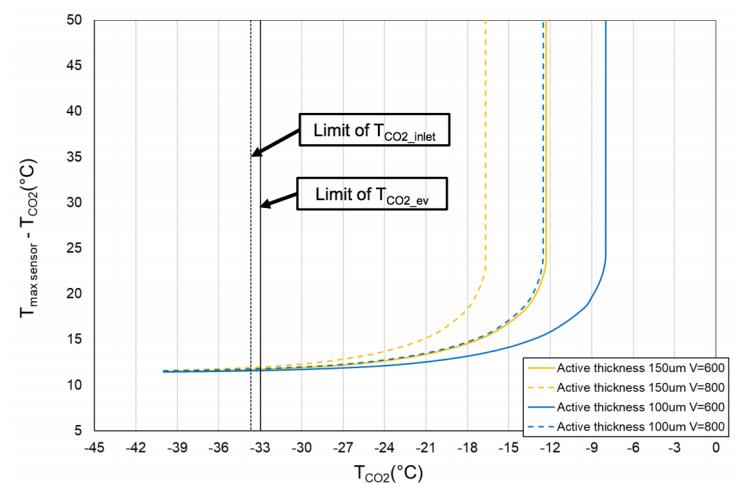
General set up



Specific goal

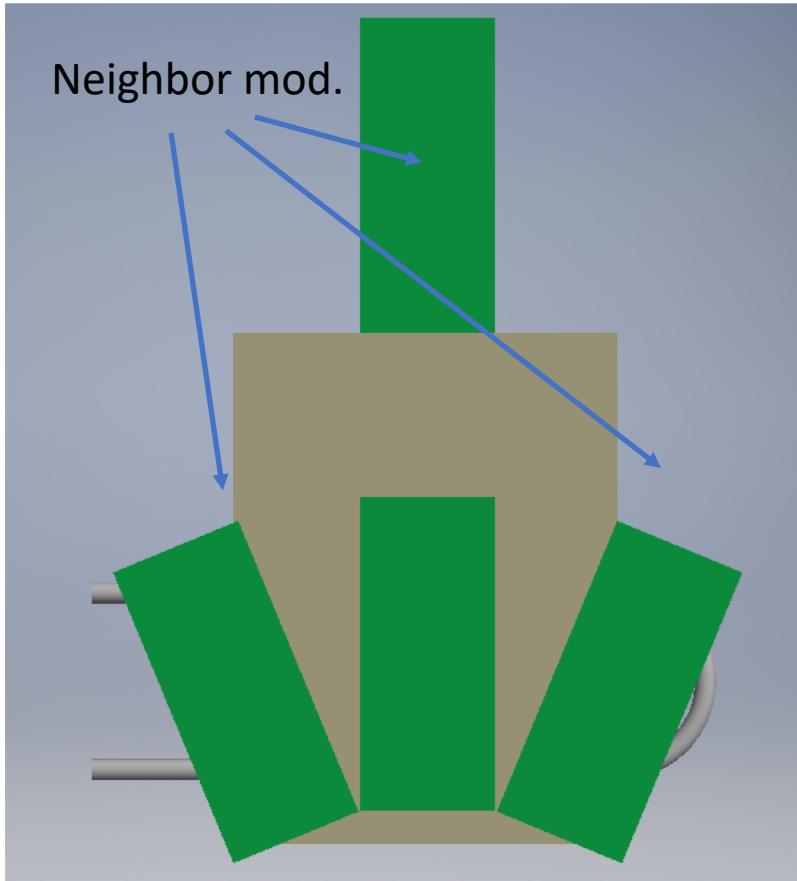


Simulated result from Francesco:

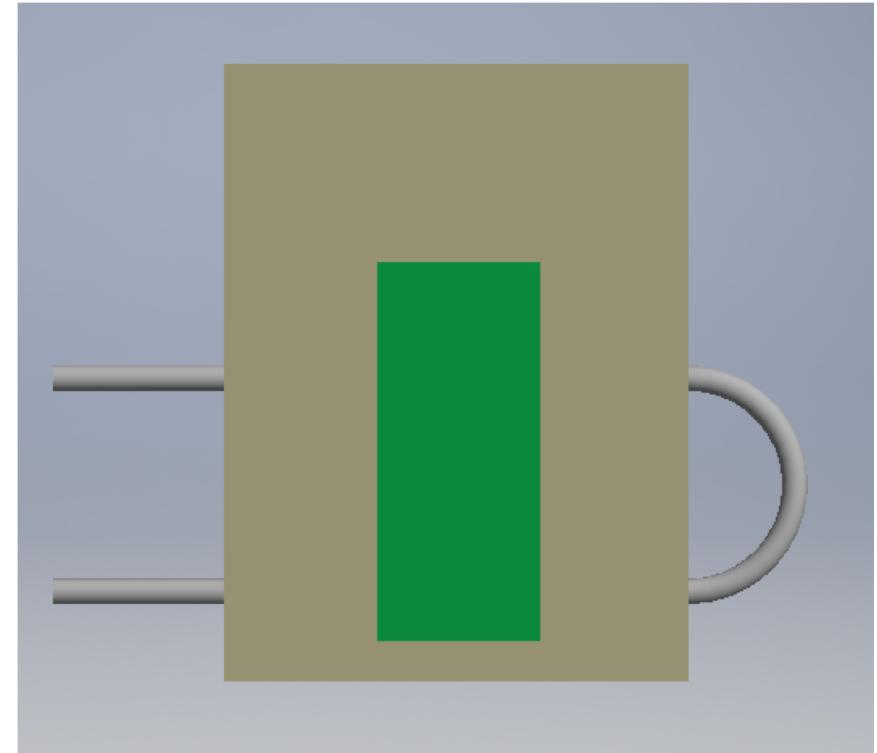


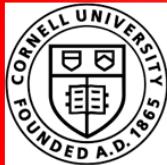
# Unit cell sample (ucs)

“One module space-region”

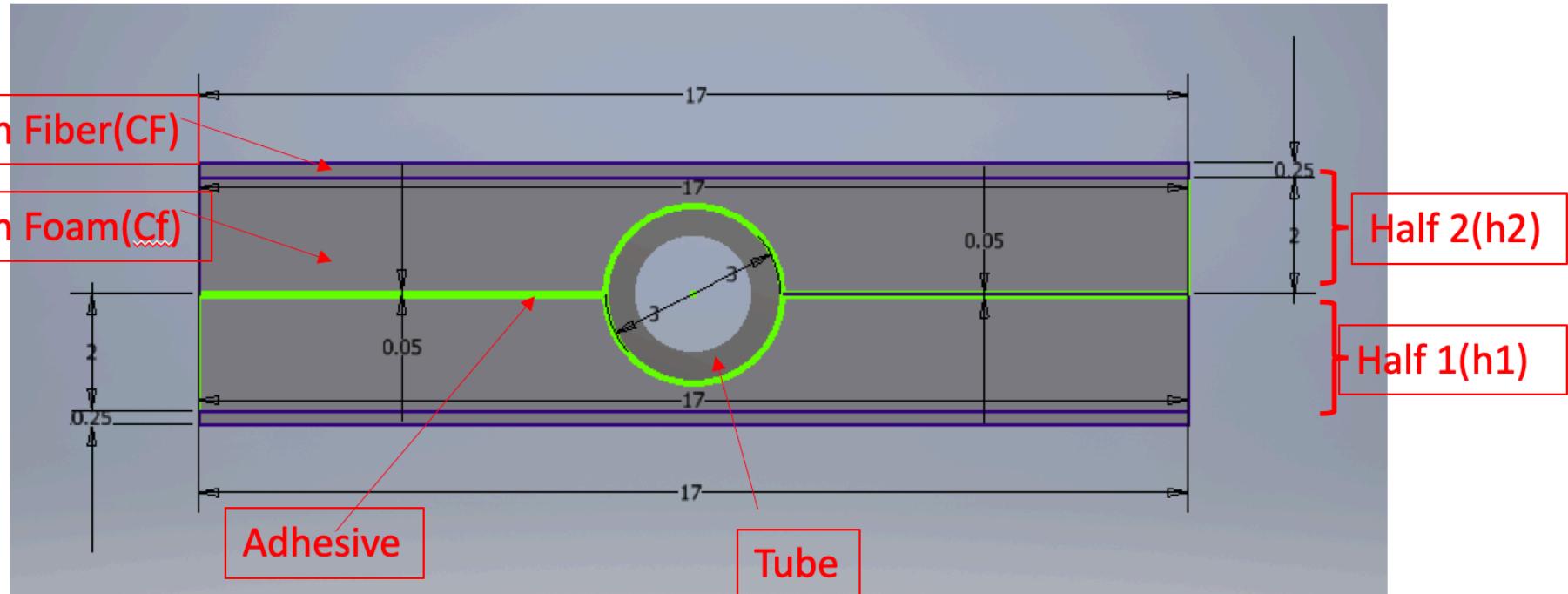


- Dimensions according to location of Neighbor modules, Cooling circuit.
- Gluing according to single tube testing

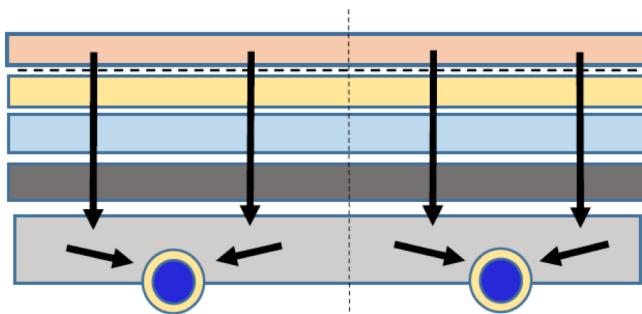
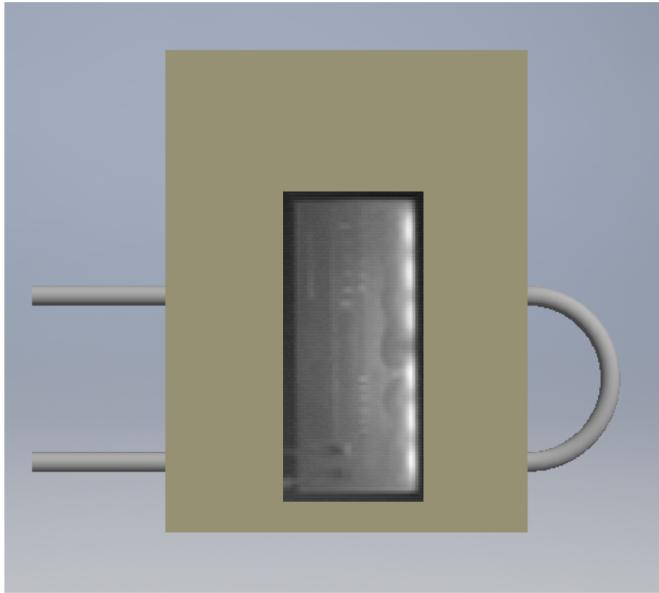




# Single tube view



- Adhesive: (**Phase I FPix**), Hysol EA 9396, CVD loaded, Graphite loaded, others.
- Tubing: Stainless steel, Titanium



## What to measure:

- Module temperature map (IR camera) as a function of power (Power Source)
- $T_{max}, T_{min}, T_{ave}$  vs  $P$  (for a  $T_{coolant} = \text{const.}$ )
- $R_{Th}$  full stack (glue + CF + Cf + TIM\* + Module)

Attach Material\*-> Laird, Grease, TPG, Paste, Graphite, AlN,CVD,...

