# Meeting Minutes 2018 Nov 24

Bijoy

* Can use any material for the ring type joint
  + 8360 data as a common material used in other papers
  + Or SS316 (but it is apparently a little hard to handle)
  + Need plasticity
* Uploaded and added spiral wound data to the model
* Need to add the load and ring type joint/gasket material
* Use a 2D model for our own thing
  + Same dimensions
  + Thickness 0 obviously
  + Just use plastic force
  + Slice of an axis down the flange
  + Clamping force gets modeled too
  + Radial contact stresses
    - If they are higher than the applied pressure, it will leak
  + Bolt load an equally distributed load across the flange (divide across the area)
  + Since we don’t really have a GDE to use
    - It is a plane strain/plane stress problem ultimately, so 2D should work

Sam

* I did code up the 3D brick model, but it is completely untested
  + Will test it this week
* BUT will focus on the 2D mesh after this meeting though
* Needs to start writing up my part of the report
* Need to think about our post-processing
  + Will it leak?
  + Graph of the loading and unloading

TODO

* Loading/unloading graph for SS316
* GDE for our code to solve
* Load and material properties in Abaqus model
* Write up drafts of our respective sections ASAP
* Brian is our graph and visualization expert
* Get 50% of the paper ready by Wednesday
* Get 80% of paper ready by our meeting on Saturday at 8 CST