**Preliminary Report Proposed Structure:**

1. Introduction
2. Background Survey
3. Background on relaxation times and bound fluid fraction in NMR (motivation etc.)
4. L. venkataramanan et al, Fredholm Integral 2002 (referred as ILT method)
5. L. venkataramanan et al, Mellin Transform 2010
6. F. K. Gruber et al, Estimation Linear Functionals 2013 (tapered areas)
7. F. K. Gruber et al, Estimation T2 with Linear Functionals 2013 (referred as ILT+ method)
8. Work Done
9. Implementation & Evaluation of the current papers and techniques
10. (Lots of diagrams, graphs, and evaluations of methods)
11. Future Plan
12. Venkataramanan et al., Estimate Porosity from NMR Data
13. Paul’s Bayesian Technique (Bayesian NMR Relaxometry)
14. New Bayesian Technique tuned for bound fraction.
15. Setting up true measured data as hypotheses for the Bayesian methodology (to form the prior)
16. Setting up cross validation setup for evaluating new method and previous methods ain the literature with the measured data
17. Request for Feedback