

Class 17, Wednesday, May 27

- We started the class with project updates.
- Daniel took over and started with the demonstration with sympy, a Python package which is used to solve symbolic math.
- Daniel then introduced Firedrake which is a finite element module. Some of the uniqueness of Firedrake is that it follows sympy in allowing for doing symbolic math.
- Firedrake is useful in reducing some of the common bookkeeping like populating the matrices etc. Once we give it a defined mesh with boundary condition, functionals and the mathematical expression which we want to evaluate, it does the matrix formulation and solving part for us automatically.
- We then covered some of the basic Firedrake functions going over the Poisson equation example/demo.