Progress Report:

* M code: no projection algo worked out yet

%Pulling Information to Plot vHat v\_hat\_track = zeros(7,1166894); for ii = 1:1166894 index = v\_hat(:,1,ii); v\_hat\_track(:,ii)=index; end %Pulling Information to Plot wHat w\_hat\_track = zeros(4,1166894); for ii = 1:1166894 index = [w\_hat(1,1,ii); w\_hat(2,1,ii); w\_hat(1,2,ii); w\_hat(2,2,ii);]; w\_hat\_track(:,ii) = index; end figure(8) plot(t,v\_hat\_track) hold on ax = gca; ax.ColorOrderIndex = 1; title('vHat vs Time') xlabel('Time (s)') ylabel('vHat') axis([0,25,-6,6]) legend('vHat1','vHat2','vHat3','vHat4','vHat5','vHat6','vHat7','Location','northeast') figure(9) plot(t,w\_hat\_track) hold on ax = gca; ax.ColorOrderIndex = 1; title('wHat vs Time') xlabel('Time (s)') ylabel('wHat') axis([0,25,-6,6]) legend('wHat1','wHat2','wHat3','wHat4','Location','northeast')

* Change the solver to ODE3:
  + In simulink where your whole schematic is), pressing Ctrl+E (or Command+E if you use Mac) and then under "Solver" changing to "Fixed Step" and then in the dropdown you can choose "ODE3"
* Check the code: we need to find what dt is?
  + We don’t need dt because we are using simulink for next iteration so we just copy paste the if/else statements
* M says: increase gains to improve dynamic estimate:
  + k = 50; kn = 10; ks = 1; B1 = ; %Projection/Saturation for vHat B2 = ; %Projection/Saturation for wHat alpha = 10; gamma1 = 5; gamma2 = 10;
* Our wHat and vHat are bounded regardless of the projection algorithm