Variables List

1. `tend`: saves time of simulation

2. `deg`: saves step size

3. `fs`: returns font size

3. `h`: legend object

4. `r`: returns the date and time pattern where all variables are saved

5. `boundary_point`: returns the end value of error dynamics norm

6. `threshold`: returns the threshold value, if `boundary_point > threshold` meaning plots are not converging

7. `tspan`: returns time of simulation in steps of `deg`

8. `x`: returns actual values

7. `xhat`: returns estimated values

9. `x0`: returns system initial conditions

10. `xhat0`: returns observer initial conditions

10. `e`: returns difference between actual and estimated values

11. `nor`: returns error dynamics norm

12. `ts`: returns number of time samples

13. `z`: returns solution matrix of ODE suite

14. `sys`: structure that returns all matrices values. For instance: system matrix 'A', input matrix 'Bu', output matrix 'C' and CVX variables such as 'P' and'L'

15. `p`: structure that returns selections such as:

- `p.user_choice`: helps select options between pre-defined, custom based dynamics and user-defined systems
- `p.obsv_choice`: helps select observer in each category
- `p.sel_sym`: selects either linear dynamical system or nonlinear dynamical system