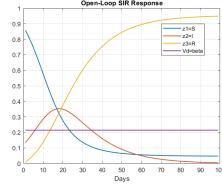
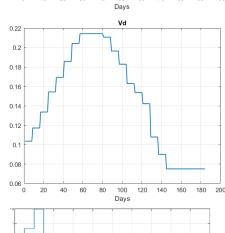
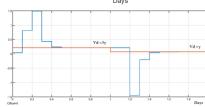
A Transmission Rate Estimator & Controller for Infectious Disease SIR Models - Constant Case



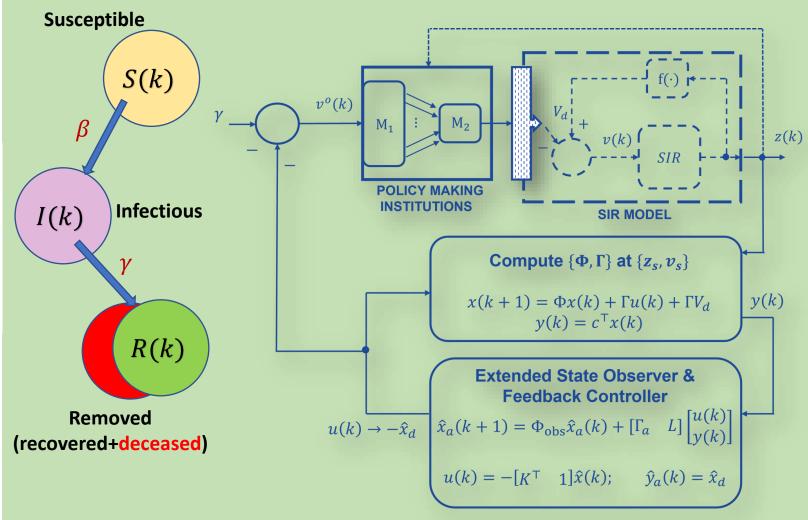


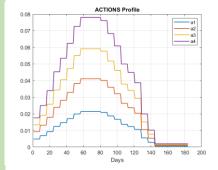






Infectious diseases - like COVID - require feedback management of mitigating actions rather than ON-OFF policies to reduce infectious waves and fatality rates



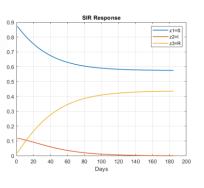


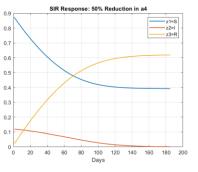
 a_1 : Social-distancing

 a_2 : Mask-wearing

 a_3 : Lock-down

 a_4 : Vaccination





Enrique Barbieri, Professor, UH

Vassilios Tzouanas, Professor UH-D