COVID-19 Mumbai SEIR Model Dynamics (N=1375987036, $R_0$ =2.280,  $\beta$ =0.326,  $1/\gamma$ =7.000,  $1/\sigma$ =5.100,  $1/\tau_q$ =14.000) 4.0 3.5 0.4 3.0 -0.3 Rt (Effective Reproductive Rate)  $\mathscr{R}_t \equiv \left(\frac{S(t)}{N(t)}\right) \mathscr{R}_0$ rI (temporal growth rate)  $r_I \equiv \gamma[\mathscr{R}_t - 1]$ 0.2  $r_I(t)$  $\frac{dI}{dt} = r_I I$ 0.1 Critical (*r<sub>I</sub>*=0.00) 0.0

