COVID-19 Mumbai SEIR Model Dynamics (N=1375987036, R_0 =2.280, β =0.326, $1/\gamma$ =7.000, $1/\sigma$ =5.100, $1/\tau_a$ =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_I*=0.00) 0.0 Critical (Rt=1.00) 1.0 -0.10.5 0.0 -0.250 100 150 200 250 350 50 100 150 250 300 350 300 200 0 Time[days] Time[days]