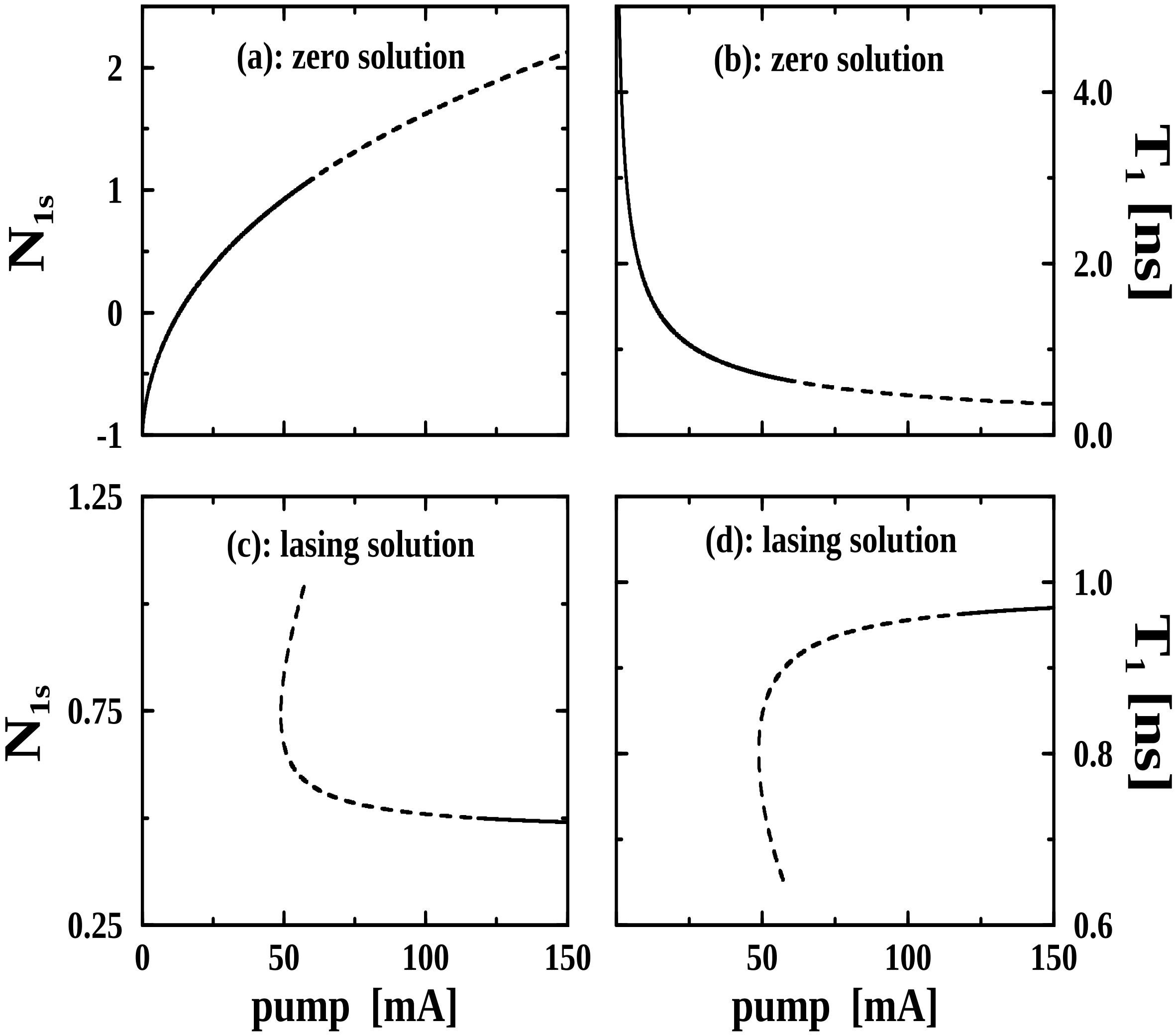


Figure 2: The fixed point values of the carrier number in the active region as a function of the pump current. The top figure (a) shows $N_{1s}$ for the nonlasing solution which becomes unstable at 58 mA. The bottom figure (b) shows the lasing solution which only is stable for currents larger than 118 mA. Solid lines indicate linearly stable solutions and dashed lines indicate linearly unstable solutions, as described after Eq. (18).