# Todo-list

- Describe model
- Make example plots of model
- Basic mathematical analysis of model
- Describe and illustrate isolines
- Show examples along isolines (both extremes and somewhere around middle)
- Make multiple simulations along particular isoline, and show relation between testProb and ratio of found recovered
- How to convert testProb to number of tests. Remember tests of S. Effect of testing previously recovered?
- Additional investigations: Different test-sensitivities (however, if test is 0.9 sens, then 1/0.9 tests should be made for same result)
- Check: How does testing of symptomatic change result?

# 1 Model analysis

The final size of an epidemic can be defined in terms of the proportion of the population that remains susceptible as time approaches infinity. We define $\sigma$ such that $S(t) \underset{t\to\infty}{\to} \sigma$. Similarly, the final size of the recovered population that were found positive through testing is defined as $R_p(t) \underset{t\to\infty}{\to} r_p$. Correspondingly, $R_n(t) \underset{t\to\infty}{\to} r_n$. We define the total recovered population, $r_{tot} = r_p + r_n$ and note that $r_{tot} + \sigma = 1$.

We aim to investigate the relation between the intensity of testing, as given by parameter $\tau$, and the proportion of recovered individuals that were identified. The latter is given by $\frac{r_p}{r_{tot}}$

Figure **??** below, **?? ??**

Figure 1: Figure text

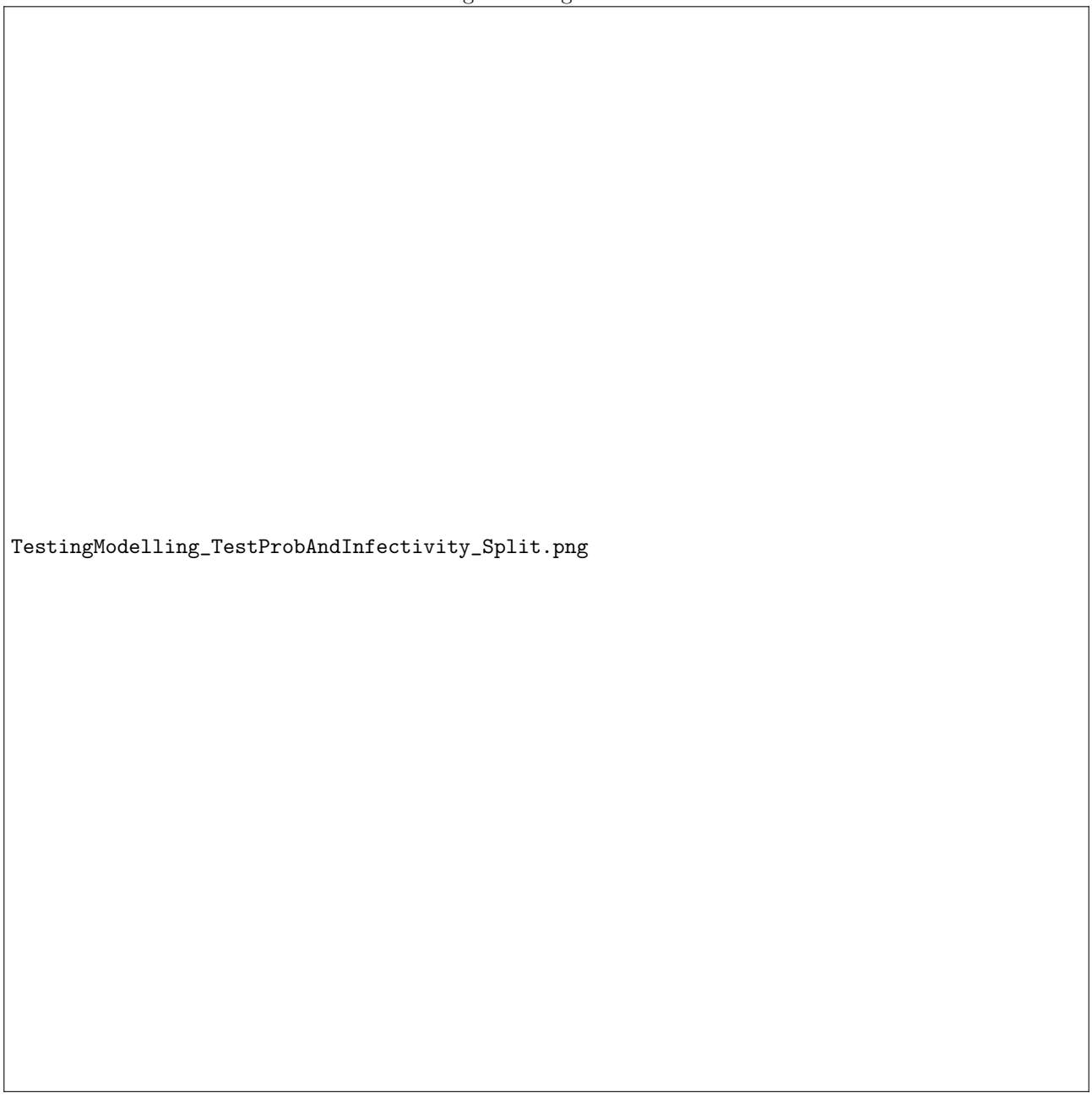


Figure 2: Figure tex