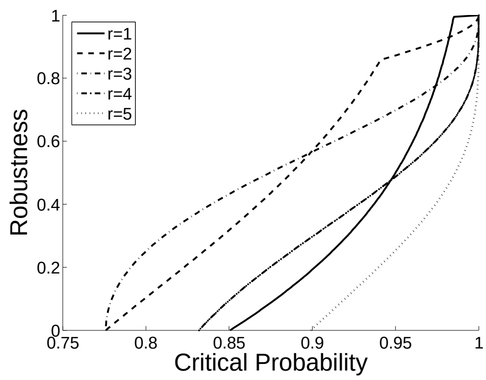

Figure 4: Robustness curves for $\widetilde{\lambda} = 3$ and $r = 1, 2, \ldots, 5$. $s_1 = s_2 = 1$.

¶ **Numerical example,** fig. 4.

• The best (but highly unreliable) estimate of the number of clients is $\widetilde{\lambda} = 3$.

• Fig. 4 shows robustness curves for server-capacities $r = 1, 2, \ldots, 5$.

• Recall the loss function, $\pi_\ell(r, \lambda)$, which is the probability of un-served clients or un-used server capacity.

• Consider the loss function at the estimated number of clients, $\pi_\ell(r, \widetilde{\lambda})$, which is the x-intersect in fig. 4, shown in table 1:

r Server capacity	$M(0) = \pi_\ell(r, \widetilde{\lambda})$ Nominal loss function
1	0.85
2	0.78
3	0.78
4	0.83
5	0.90

Table 1: Nominal loss function for different server capacities.

• We want $\pi_\ell(r, \widetilde{\lambda})$ small, so, based on the best-estimate of the client-arrival rate, $\widetilde{\lambda}$, our preferences on values of r are:

$$3 \sim_{\rm n} 2 \succ_{\rm n} 4 \succ_{\rm n} 1 \succ_{\rm n} 5 \qquad (72)$$

The subscript 'n' indicates that these are 'nominal' preferences.