Table S7. Empirical false positive rate. Bottleneck model with varying duration of the bottleneck. Severity (duration divided by strength) is fixed at 1. Significance levels  $\alpha$  are based on theoretical formulae according to eqs (7) and (8).

	$\alpha = 0.01$			$\alpha = 0.05$		
duration	$T_2^{(\mathrm{sum})}$	$T_2^{(\text{product})}$	$T_0^{(\text{dist})}$	$T_2^{(\mathrm{sum})}$	$T_2^{(\text{product})}$	$T_0^{(\mathrm{dist})}$
0.0010	0.04559	0.02314	0.00934	0.23533	0.17179	0.02909
0.01	0.02976	0.01627	0.00934	0.19411	0.14517	0.029
0.1	0.00468	0.00325	0.00667	0.0532	0.04092	0.0242