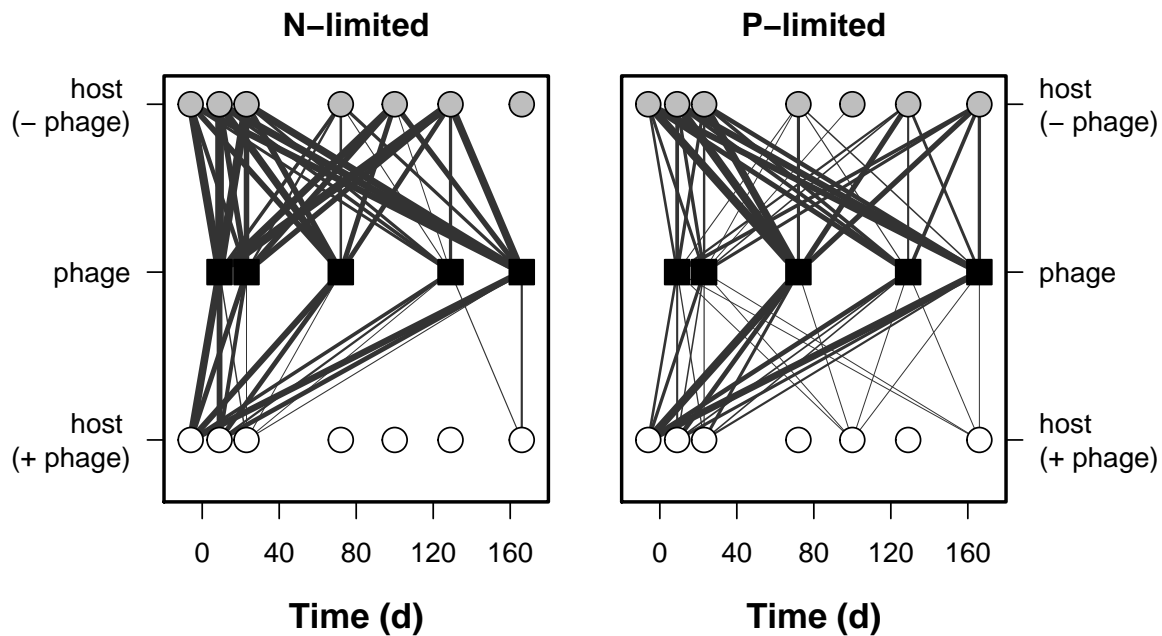# Evolutionary Dynamics

1 Data Reduction and Figures

1.1 Evolutionary Networks

1.1.1 Figure 2: Co-evolutionary dynamics
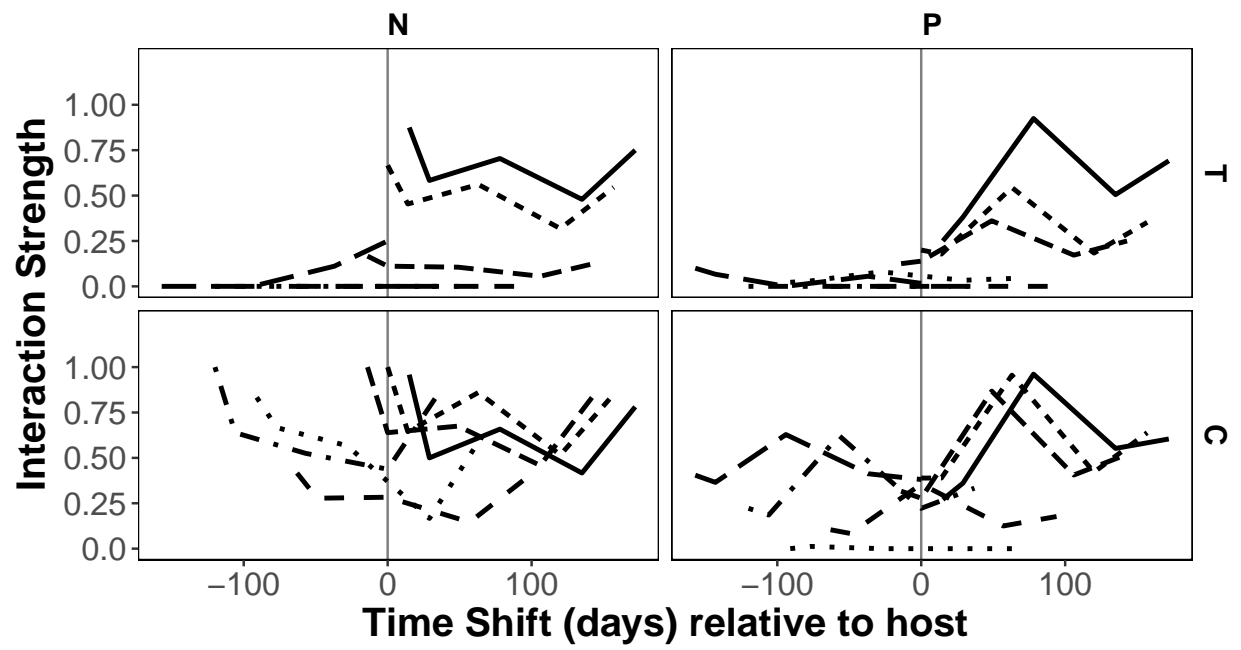
1.1.2 RMANOVA for Interaction Strengths

	AIC	BIC	logLik	L.Ratio	p-value
model.ar	169.1	260.1	-65.57	NA	NA
model.arma1	115.5	211.3	-37.76	55.63	8.769e-14
model.arma2	98.61	199.2	-28.31	18.91	1.37e-05

	Std.Error	t-value	p-value
(Intercept)	**0.07713**	**9.872**	**7.099e-22**
trtT	**0.08638**	**-3.702**	**0.0002276**
limP	**0.09298**	**-4.93**	**0.007875**
phage.time	0.0006172	-1.916	0.05569
bac.time	0.001005	0.1231	0.9021
trtT:limP	0.1078	1.856	0.06381
trtT:phage.time	0.0007027	1.008	0.3136
limP:phage.time	**0.0007399**	**3.511**	**0.0004695**
trtT:bac.time	**0.001097**	**-3.091**	**0.00206**
limP:bac.time	0.001136	-0.02436	0.9806
phage.time:bac.time	8.462e-06	-1.811	0.07056
trtT:limP:phage.time	0.0008774	-0.9831	0.3258
trtT:limP:bac.time	0.001294	1.933	0.05351
trtT:phage.time:bac.time	**9.205e-06**	**2.014**	**0.04427**
limP:phage.time:bac.time	9.576e-06	0.4493	0.6533
trtT:limP:phage.time:bac.time	1.086e-05	-1.801	0.07197

1.2 Evolutionary Time-shifts

1.2.1 Figure 3 | Figure S

1.3 Time-shift statistics

	AIC	BIC	logLik	L.Ratio	p-value
model.ar	169.1	260.1	-65.57	NA	NA
model.arma1	115.5	211.3	-37.76	55.63	8.769e-14
model.arma2	98.61	199.2	-28.31	18.91	1.37e-05

	Std.Error	t-value	p-value
(Intercept)	**0.03853**	**16.31**	**1.635e-52**
trtT	**0.04353**	**-10.05**	**0.0001667**
limP	**0.04541**	**-6.084**	**0.001735**
time.shift	**0.0003838**	**-2.211**	**0.02726**
trtT:limP	**0.05345**	**4.45**	**0.006701**
trtT:time.shift	**0.0004238**	**4.997**	**7.002e-07**
limP:time.shift	**0.0004391**	**3.912**	**9.853e-05**
trtT:limP:time.shift	**0.0005044**	**-3.341**	**0.0008681**