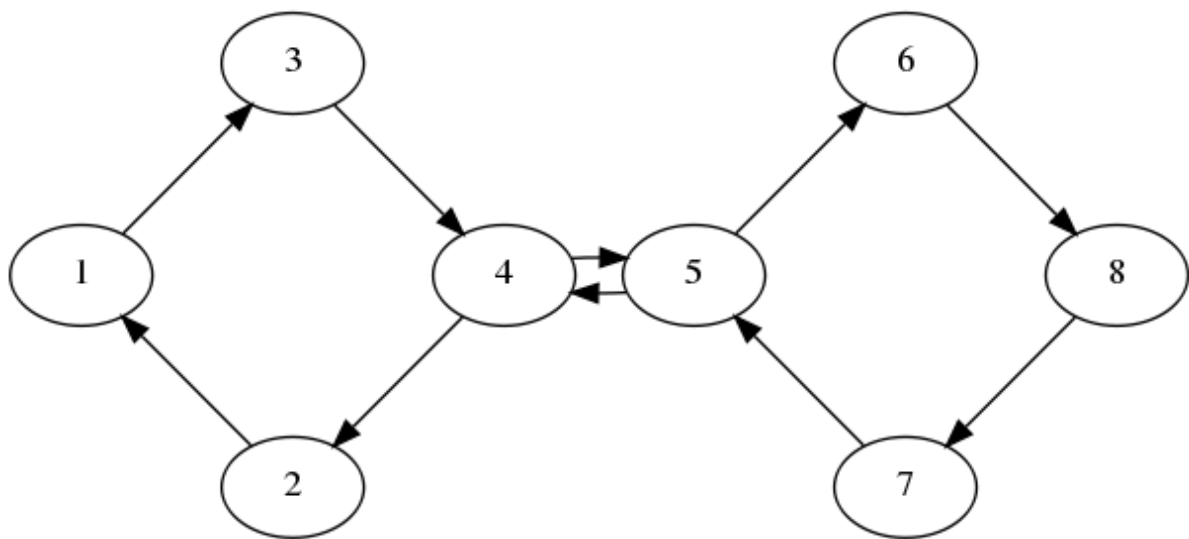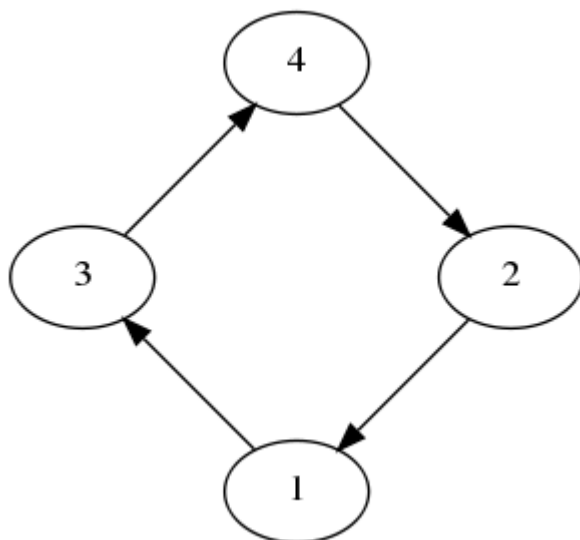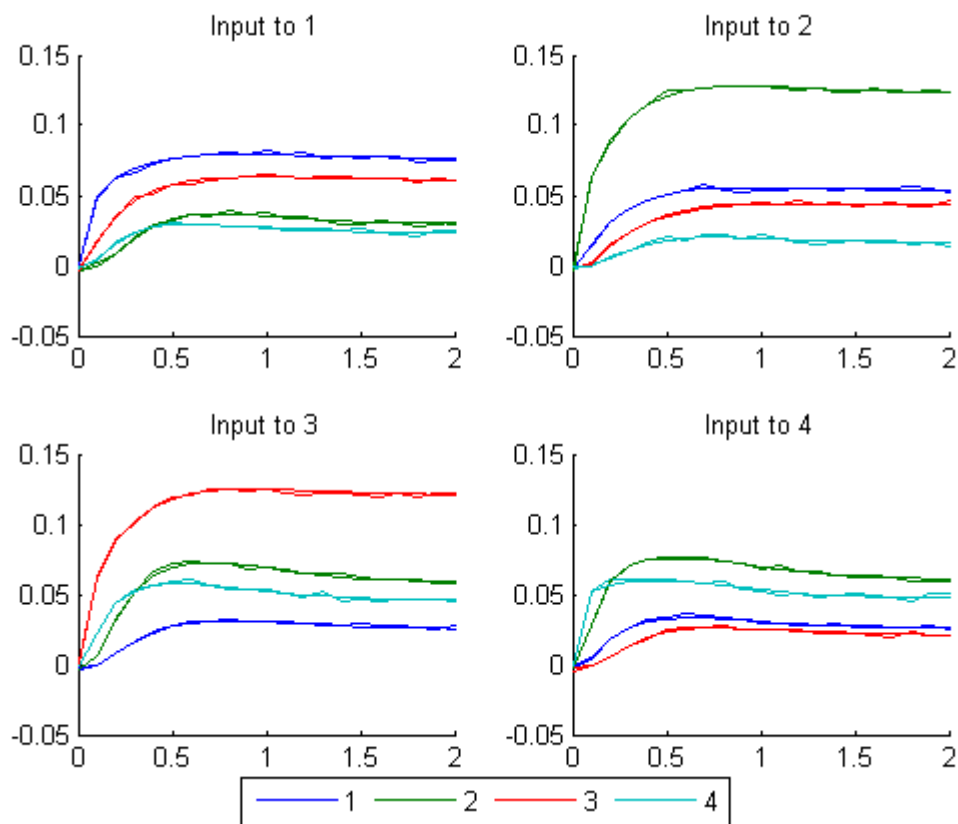# NETWORK 3: DOUBLE RING

For the structure above, the network with the best AICc score was chosen for the robust control method. For the Bayesian method, we chose structures by varying the z significance level of confidence.
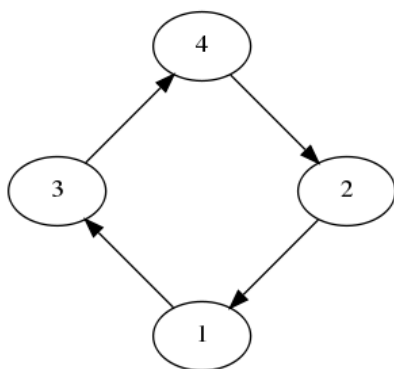
We measured the following sub network:

TRIAL 1

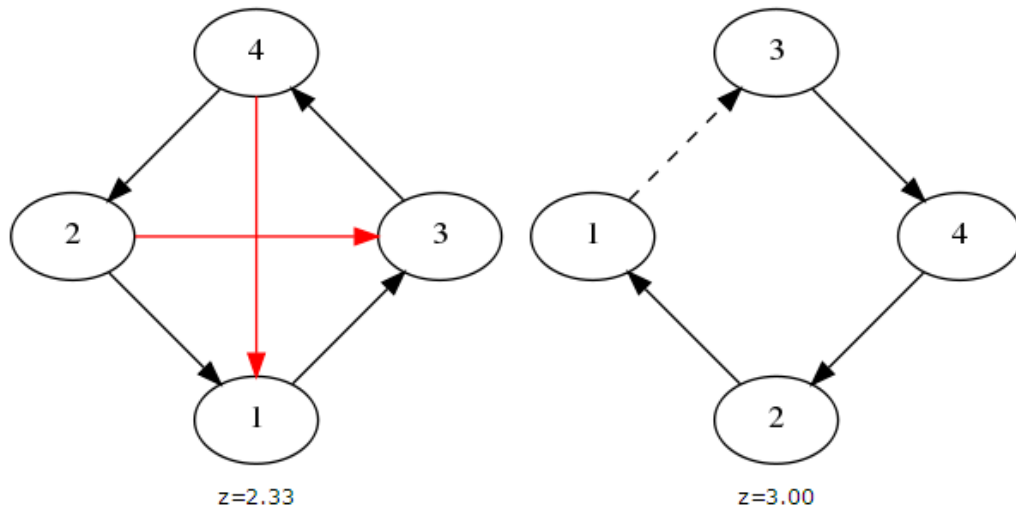**SNR of the time series = 32.66**

Robust Control Method

Structure: 010100001010 **Distance:** 0.0363 **AIC:** 0.5474 **AICc:** 4.1837

BIC: -13.2590
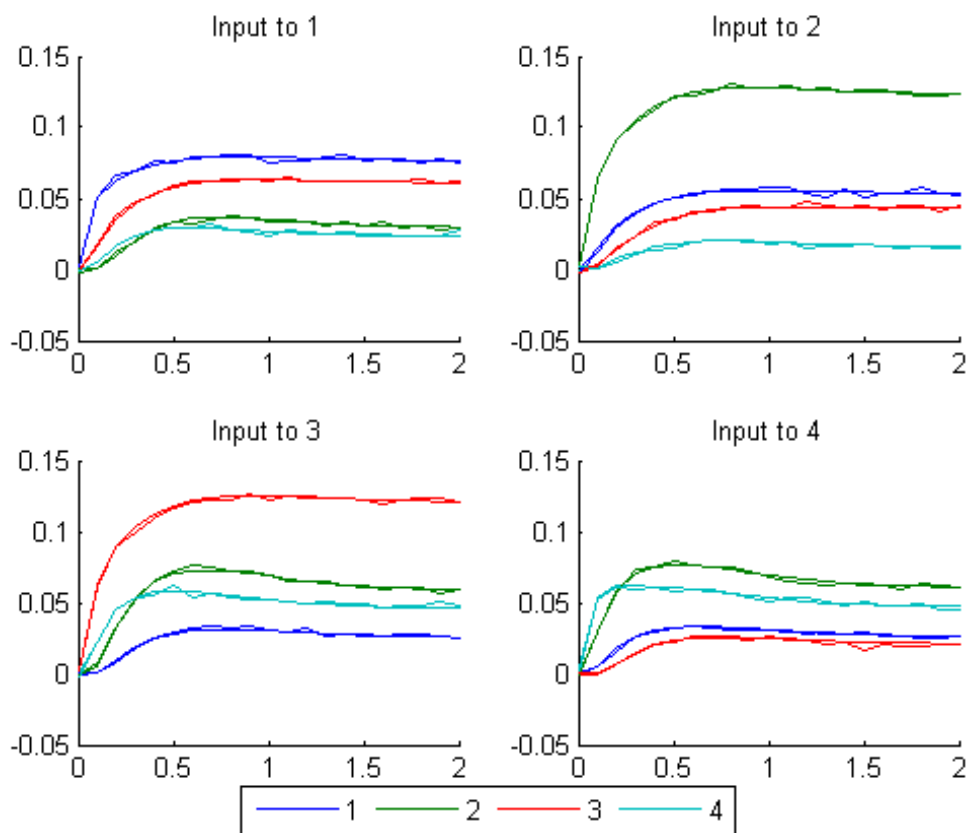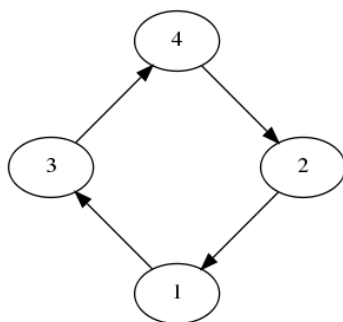
Bayesian Inference Method

T=80, N=3

z=2.33   z=3.00

RED LINES= FALSE POSITIVES. DASHED LINE= MISSING CONNECTION.

TRIAL 2

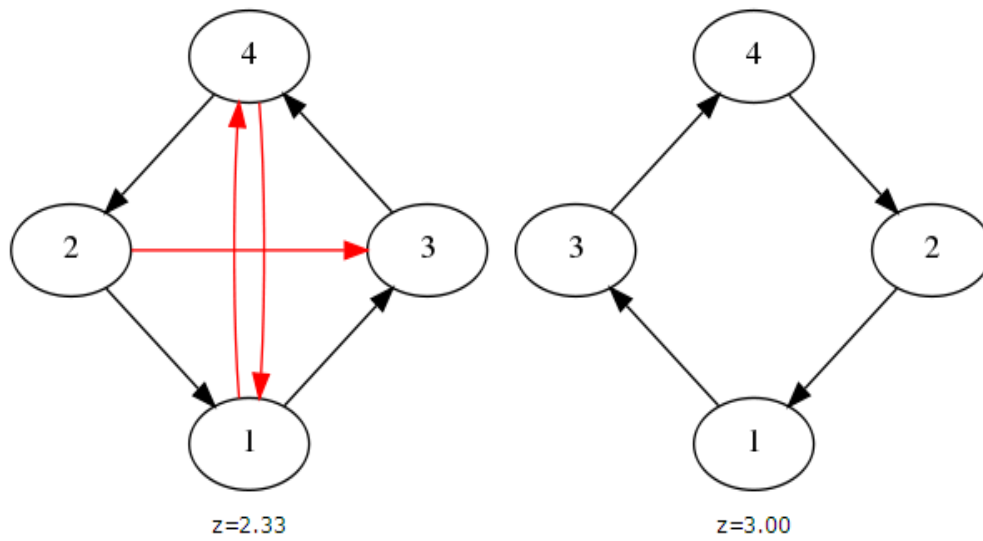**SNR of the time series= 28.91**

Robust Control Method

Structure: `010100001010` **Distance:** `0.0482` **AIC:** `1.6748` **AICc:** `5.3111` **BIC:**

`-12.1316`

Bayesian Inference Method
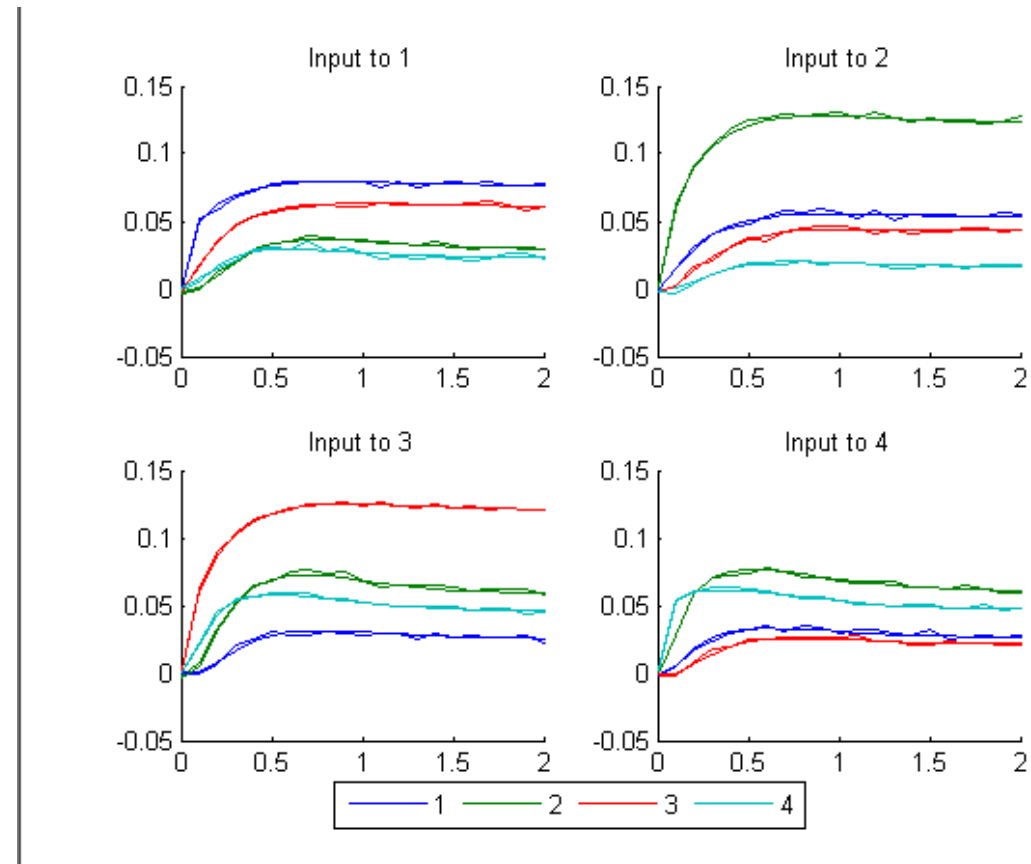

z=2.33   z=3.00
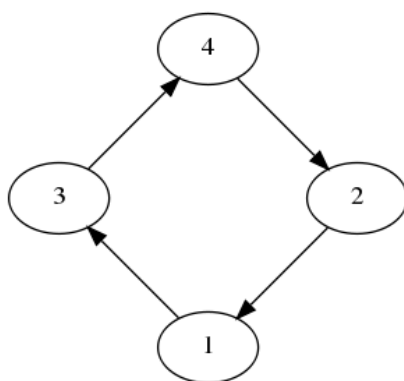

Red Lines= False Positives

Dashed Lines=Missing Connections (False Negatives)

TRIAL 3

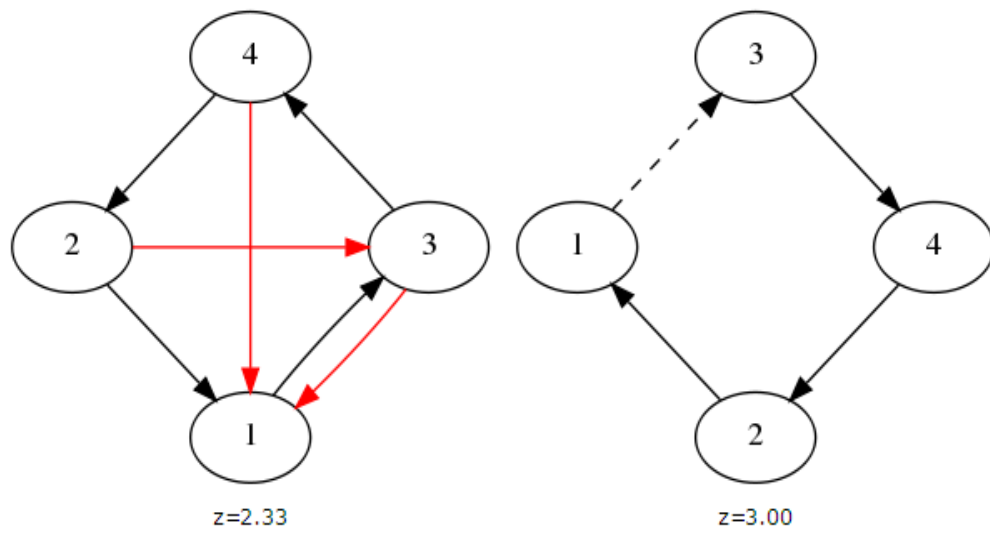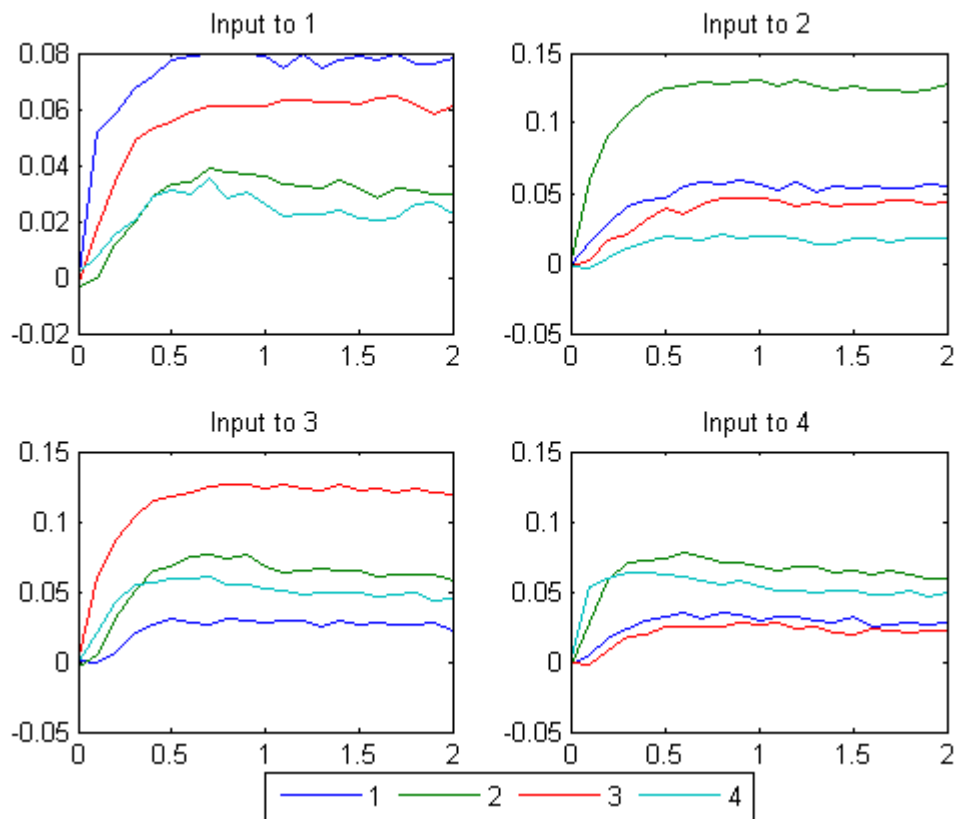**SNR of time series= 27.35**

Robust Control Method

Structure: `010100001010` **Distance:** `0.0764` **AIC:** `3.5211` **AICc:** `7.1575` **BIC:** `-10.2852`

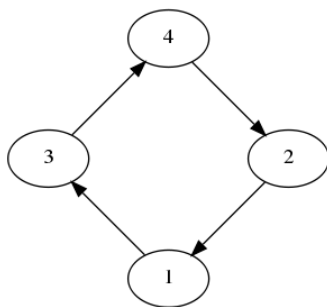**Bayesian Inference Method**

z=2.33

z=3.00

TRIAL 4:

SNR of the time series= 24.62

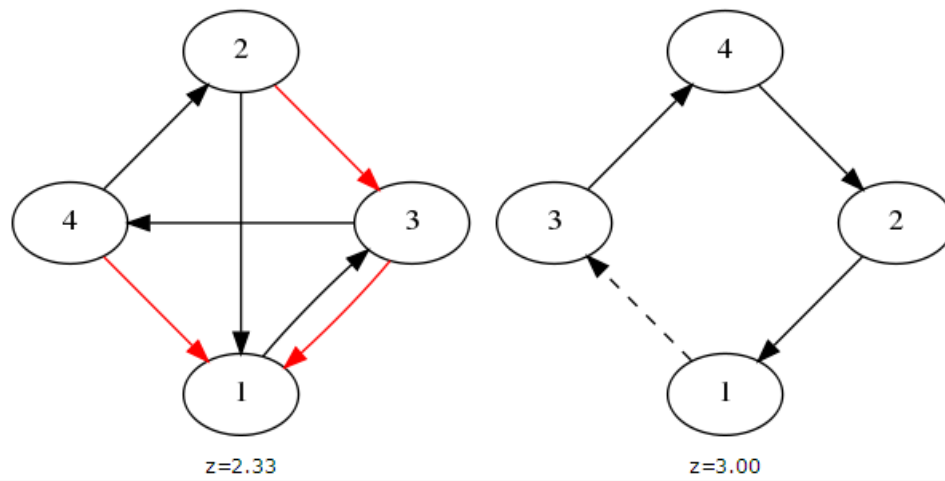**Robust Control Method**

Structure: 010100011010 **Distance:** 0.0939 **AIC:** 4.3438 **AICc:** 7.9801

BIC: -9.4626

Bayesian Inference Method

FOR T=80 and 3 repeats.

z=2.33   z=3.00

RED LINE= FALSE POSITIVE

DASHED LINE= MISSING CONNECTION