

Centrality and spectral radius in dynamic communication networks

[illegible]

Abstract.

K

($\frac{1}{2}$)

fi

MH

106

K

12.4

$$: \quad l \quad \text{,} \quad p \quad l \quad \text{,} \quad l$$

1 Introduction

[illegible]

$q_1 \quad q_2 \quad q_3 \quad \dots \quad q_n$ $(\quad , 1) , \quad 1 \quad 1 \quad 1 \quad 1$
 $q_1 \quad 1 \quad 1 \quad \dots \quad , 1 \quad .$
 $\quad , \quad 1 \quad 1 \quad p \quad 1 \quad fl$
 $q_1 \quad ll \quad q_1 \quad b \quad \dots \quad b \quad q_1 \quad \dots \quad b$
 $q_1 \quad \dots \quad q_1 \quad \dots \quad b \quad . \quad 1 \quad q_1 \quad q_1 \quad \dots \quad b$

2 Relaxed Communicability

2.2 $\mathbf{B}$

$$A_i$$

$$(I-\alpha A_i)^{-1} \sum_{k=0}^1 \alpha^k A_i^k \tag{}$$

$$\alpha < \frac{1}{\max(A_i)}, i = 0, \dots, M$$

$l \in \mathbb{N}$ p q p l $\mathbb{R}$, α ll l b l
 1 q p l q q p l $\mathbb{R}$ q p q $\mathbb{R}$
 $, \dots$ q l q $\mathbb{R}$, b l q
 b l q , l l $\mathbb{R}$ p l q p q $\mathbb{R}$
 ppl , l l α $()$ $\mathbb{R}$, l b b ll -
 q l pl α q A_i l q 2 - A_i l .
 $\mathbb{R}$ p ll p q n , q p q ll
 $, pp$ q b , $\mathbb{R}$ l A_i . l q
 b l pl q ll A_i . ll $\mathbb{R}$ p , Q b
 b q q l $()$ $\mathbb{R}$ p q α q pl $\mathbb{R}$ A $\frac{A}{kAk}$.

2.4 i l i

q q b p q $\mathbb{R}$ p q l q
 l b q b p $\mathbb{R}$ p q $\mathbb{R}$ l q
 b p q $\mathbb{R}$ $A_{i_1}, \dots, A_{i_2}$
 p b l q $\mathbb{R}$ q q q l q $-$
 b l q . k , p Q_k , b -
 q q l $\mathbb{R}$ 0 2 2 0 q (k) $\mathbb{R}$ $/$. 1 0 q $($ $(/)$ 2 $()$ $- 2$. 1 0 q $($ 2 $($ $\mathbb{R}$

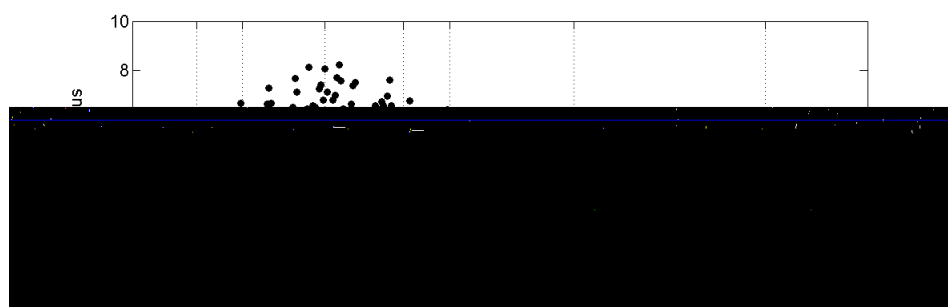


Fig. 2. MI: $\bullet$ A_1 , $\circ$ A_{365} , Δ A_{365} .



Fig. 3. MH₂: A 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32.

Table 1. χ^2 (1 d.f.) for χ^2 test of independence (106) = 1.11

l	$-\left(\frac{1}{l}\right)$	$-\left(\frac{1}{l}\right)$
10	71	21
45	35	25
59	85	28
71	71	21



Fig. 4. The results of the signal processing for the first and second channels. The left plot shows the signal for the first channel, and the right plot shows the signal for the second channel. The y-axis represents the signal amplitude, and the x-axis represents time.

The results of the signal processing for the first and second channels are shown in Fig. 4. The left plot shows the signal for the first channel, and the right plot shows the signal for the second channel. The y-axis represents the signal amplitude, and the x-axis represents time. The signal for the first channel is shown in the left plot, and the signal for the second channel is shown in the right plot. The signal for the first channel is shown in the left plot, and the signal for the second channel is shown in the right plot. The signal for the first channel is shown in the left plot, and the signal for the second channel is shown in the right plot.

3.3 Results

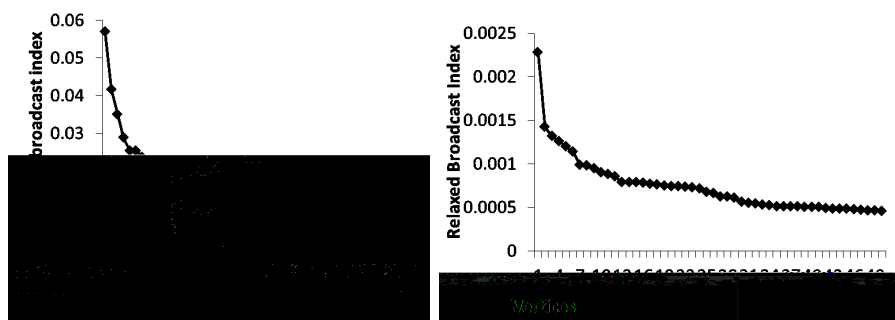


Fig. 5. The results of the signal processing for the first and second channels. The left plot shows the broadcast index, and the right plot shows the relaxed broadcast index. The y-axis represents the broadcast index, and the x-axis represents time.

The results of the signal processing for the first and second channels are shown in Fig. 5. The left plot shows the broadcast index, and the right plot shows the relaxed broadcast index. The y-axis represents the broadcast index, and the x-axis represents time. The signal for the first channel is shown in the left plot, and the signal for the second channel is shown in the right plot. The signal for the first channel is shown in the left plot, and the signal for the second channel is shown in the right plot. The signal for the first channel is shown in the left plot, and the signal for the second channel is shown in the right plot.

References

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