Centrality and spectral radius in dynamic communication networks

Abstract.

1 Introduction

2 Relaxed Communicability

2.2 B

( ), A_i

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

( ) , - $\alpha < \frac{1}{(A_i)}$ $\alpha < \frac{1}{\max((A_i))}$, i $0, \ldots, M$ ( ). , A_i, α , , A αA , 1 ( )- (( )-2 (1 -2 ( ) (( )-2

$l \in \mathbb{N}$, α

l

, . . .

,

, α ( ) l, b

α A_i 2- A_i .

n,

A_i.

A_i . Q

( ) α A $\frac{A}{kAk}$.

2.4

. $A_{i_1}, \cdots, A_{i_2}$

. , k, Q_k,

0 2 2. 0 ( ) / . 1 . 0 ((/)2 ( )- 2 . 0)-2 0 (2 (

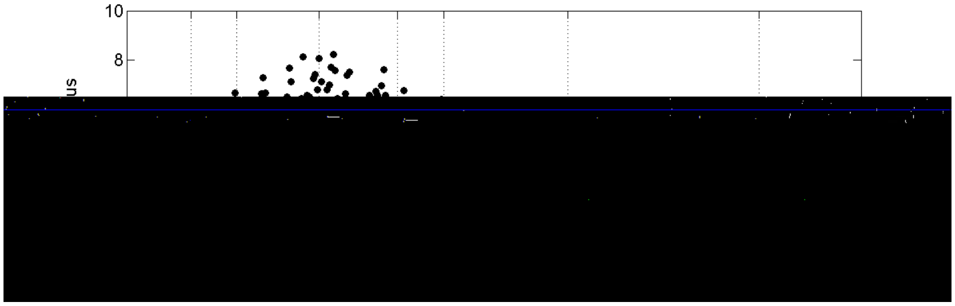

Fig. 2. MI A_1 A_{365} .

Fig. 3. MI : A ( ), 32.

Table 1. (, 1 106) .

[illegible]	[illegible]	[illegible]
10	71	21
45	35	25
59	85	28
71	71	21

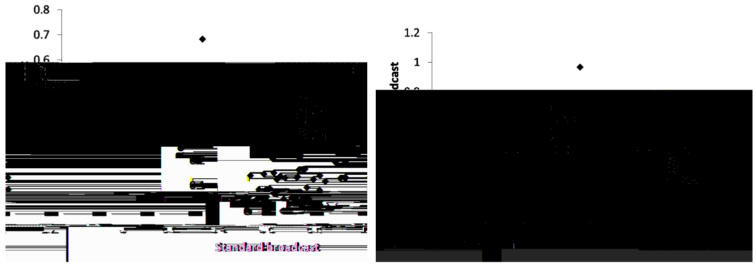

Fig. 4.

12 08 2.

3.3

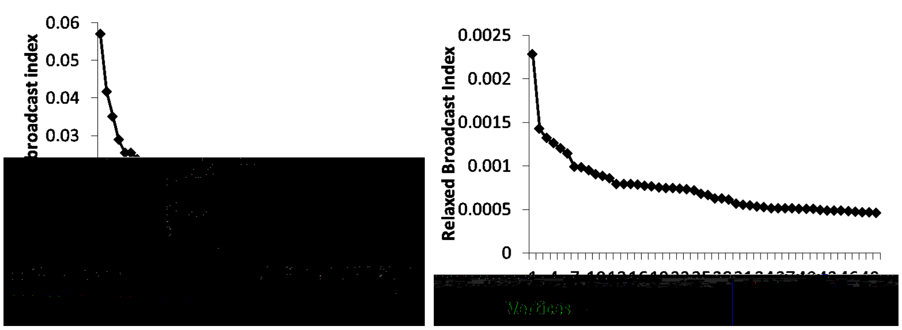

Fig. 5. 50

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