

Коррекция текста статьи
Critical Multitype Branching Processes on a Graph and the Model of the
HIV Infection Development.
на основе замечаний Рецензента

- с. 1 (144)

Во всем тексте **слово** vertexes (настоячиво предлагаемое Goggle) **заменено** на правильное vertexes

- с. 3 (146)

Текст

The number of offspring and lifetime of parents are described in terms of some point processes (see Section 3). We assume that all second moments of these point processes are finite. The explicit forms and asymptotic behavior of the first and second moments for critical Crump-Mode-Jagers model are described in [13].

заменен на

The evolution of individual particles in the multi-type case are described in terms of point processes that determine the joint distribution of a finite number of pairs: the ages of generation of groups of offspring and the number of offspring in these groups (see Section 3). The maximum age in the pairs is the lifetime of the particle. Age-related integer multivariate random variables describe the non-zero number of offspring in these groups with a distribution by type. The exception is the number of offspring at the time of the death of the particle, which may be zero. Point processes describing the evolution of particles are independent and equally distributed for coincident types of particles. The main characteristics of the evolution of individual particles are the distributions of their lifetime and the total number of generated offspring. We believe that all these particle-specific pairs of random variables have finite second moments. The explicit forms and asymptotic behavior of the first and second moments for the number of particles in the critical Crump-Mode-Jagers model are described in [13].

Текст

The specificity of the model makes it possible to transfer transformations on edges to vertices, find eigenvectors for auxiliary processes of small dimension, and then return to the original problem.

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The specificity of the model makes it possible to transfer transformations of particles on edges to vertices, find eigenvectors for auxiliary processes of small dimension, and then return to the original problem.

- с. 4 (147)

слово generate **заменено на** generates

Текст

Denote \mathcal{M} -CMJ branching process by $\mathbf{Z}(t)$.

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Denote \mathcal{M} -CMJ branching process by $\mathbf{Z}(t)$. Counting processes describing the evolution of particles of the type $A_{i,j}$ specify a representation for $\xi(A_{i,j})$ – the total number of its offspring

$$\xi(A_{i,j}) = \sum_{(s,k) \in \mathcal{S}} (\xi(A_{i,j}, A_{s,k}) + \xi(A_{i,j}, B_{s,k})),$$

where $\xi(A_{i,j}, A_{s,k})$ is the random number of offspring of the $A_{s,k}$ type generated by the $A_{i,j}$ type particle. Denote the mean of offspring of the $A_{s,k}$ type number generated by the $A_{i,j}$ type particle through $m(A_{i,j}; A_{s,k}) = \mathbb{E}\xi(A_{i,j}, A_{s,k})$ and the same for $B_{s,k}$ through $m(A_{i,j}; B_{s,k}) = \mathbb{E}\xi(A_{i,j}, B_{s,k})$.

Similar representations are true when replacing the particle type of the parent $A_{i,j}$ with the type $B_{i,j}$. In this case, we denote $m(B_{i,j}; A_{s,k}) = \mathbb{E}\xi(B_{i,j}, A_{s,k})$ and $m(B_{i,j}; B_{s,k}) = \mathbb{E}\xi(B_{i,j}, B_{s,k})$.

- с. 5 (148)

Текст перед формулой (6)

Suppose that

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Suppose that the following conditions are true

- с. 12 (154)

слово Viktirovich **заменено на** Viktorovich

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