

[Neveu, J.](#)

Arbres et processus de Galton-Watson. (Trees and Galton-Watson processes). (French)

[Zbl 0601.60082](#)

[Ann. Inst. Henri Poincaré, Probab. Stat. 22, 199-207 \(1986\).](#)

This article is motivated by the fact, that the notion of a tree in the theory of branching processes is rather just intuitive than formalized. According to the author - and there is a convincing example to support this - the branching property is not sufficiently worked out so that probabilists have to fall back upon analytic tools in demonstrations or proofs where probabilistic reasoning would be more natural.

The result of the paper is the introduction of a formalized notion of a tree in the case of Galton-Watson processes proving a general branching property. The impact is illustrated by the author's new proof of results obtained by Joffe and O'N Waugh on kin number distributions. An extension treats the case of more general 'marked' trees.

Reviewer: [F.T.Bruss](#)

MSC:

[60J80](#) Branching processes (Galton-Watson, birth-and-death, etc.)

Cited in **1** Review
Cited in **66** Documents

Keywords:

[notion of a tree in the theory of branching processes](#); [Galton-Watson processes](#); [kin number distributions](#)

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