**Document Type**: Thesis

**Document Title** : On the no parametric estimation of the intersity function on no homogeneous poison

procees in R2

حول التقدير اللامعلمي لدالة كثافة العمليات البواسنية غير المتجانسة في المستوى

Subject : Statistics
Document : Arabic

Language Abstract

**:** In order to study a special group of data, we need to choose a suitable probability

distribution, and using its properties to get all results of that data. In applied work, its necessary some times to collect the data during different times or from different places. For reasons indicated above, the probability theory was suggest to study probability models, which is a function of the time (or the places). A random phenomenon that arises through a process, which is developing in time in a manner controlled by probabilistic laws, is called a stochastic process. Stochastic process is very important in our life, it is an essential part of many fields such as statistical physics, the theory of population growth, communication and control theory, management science, operations research and time series analysis. The Poisson process plays a central role in the theory of stochastic processes with continuous parameter and discrete state space, it is a building block with which other useful stochastic processes can be constructed. In this thesis, we shall study the Poisson process on R2. We shall use two non-parametric estimation methods (histogram method and kernel method) to estimate the intensity function f. We also, look for the necessary and sufficient conditions which make the estimator converge uniformly in

probability with probability one and almost completely sure) to f

**Publisher** : King Abdulaziz University

**Supervisor** : Dr. Tarek Amira **Thesis Type** : Master Thesis

**Publishing Year** 

2000 AD

**Co-Supervisor**: Dr. Angah Al-Sayegh

الباحثون

العنوان (انجليزي)	العنوان (عربي)	البريد الالكتروني	المرتبة العلمية	نوع الباحث	الاسم الأخير (انجليزي)	الاسم الأخير (عربي)	الاسم الثاني (انجليزي)	الاسم الثاني (عربي)	الاسم الأول (انجليزي)	الاسم الأول (عربي)
			ماجستير	باحث	Kalantan	كلنتن	Ibrahim	إبراهيم	Zakia	زكية