

# НАЦИОНАЛЕН СЕМИНАР ПО СТОХАСТИКА

*секция „Изследване на операциите, вероятности и статистика“*

Поредната сбирка на *Националния семинар по стохастика* ще се проведе на **19 февруари 2020 г.** (сряда) от **14:00** часа в зала **403** на ИМИ-БАН. Доклад на тема:

***"Infinite-color, randomly reinforced urn processes with dominant colors"***

ще изнесе Христо Сариев (Università Commerciale Luigi Bocconi, Италия).

**Abstract:** In this work we consider a general class of stochastic processes with random reinforcement that are extensions of the celebrated Pólya sequence by Blackwell and MacQueen [*Ann. Stat.* **1** (1973) 353-355]. The resulting randomly reinforced Pólya sequence (RRPS) can be described as an urn scheme with countable number of colors and a general replacement rule. We study a particular specification of the replacement mechanism of a RRPS, which allows for the discrimination of colors based on their expected reinforcement; thus, colors associated to larger reinforcement values on average are deemed dominant. The implied sampling procedure is best understood in the context of randomized, response-adaptive designs of clinical trials for a single treatment, whereby each draw from the urn indicates the delivery of a specific dose from the treatment to a new patient, and the subsequent reinforcement of the urn contents is a function of the patient's response to it.

Поканват се всички интересуващи се.