

*The 9th International Iranian Workshop on
Stochastic Processes, October 25-27, 2011, IPM, Tehran, Iran*

Plenary Talk
Positive Self Similar Markov Processes (pssMp)

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A brief introduction to this class of processes will be given. The the Lamperti transformation will be introduced, in order to see the relationship between pssMp and the class of Lévy processes (Lp). Recent developements will be presented: entrance laws and some other theoretical problems of convergence. We will illustrate how the Lamperti transformation has been used in order to construct many explicit examples of both classes of processes which have been proved useful in applications.

Special Session
Hypergeometric-stable Processes

We will present an example of the Lamperti transformation in the case of the pssMp which is obtained as the norm of an R^d valued symmetric stable Lévy process. We will study the new Lévy process obtained by this method and we will present some properties of both processes.. We will also compute the characteristic exponent and the Wiener-Hopf factorization of the Lévy process.