

RANDOM NASH EQUILIBRIUM

OSKAR GÓRNIEWICZ

Faculty of Mathematics and Information Science
 Warsaw University of Technology
 E-mail: oskgor@gmail.com

Abstract. In this paper the notion of random n -persons game is defined. The most important problem of such games is the existence of Random Nash Equilibrium (RNE) which is defined in section 4. Since not every random game has RNE, we will consider here a subclass of random games called admissible random games. Finally, using a generalized version of Kakutani's theorem it is proved that for any admissible random game there exists a RNE.

Key Words and Phrases: Nash equilibrium, random fixed points, multivalued operators.

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