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ABSTRACTS

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The collection contains abstracts of papers accepted for the European Meeting on Game Theory (July 08-10, 2015, Saint Petersburg State University, Saint Petersburg, Russia). The presented abstracts belong to the field of game theory and its applications.

The abstract volume may be recommended for researches and post-graduate students of management, economic and applied mathematics departments.

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ЕВРОПЕЙСКАЯ КОНФЕРЕНЦИЯ ПО ТЕОРИИ ИГР (SING11-GTM2015). Сб. тезисов Европейской конференции по теории игр / Под ред. Л.А. Петросяна и Н.А. Зенкевича. – СПб.: Санкт-Петербургский государственный университет, 2015. – 192 с.

Сборник содержит тезисы докладов участников Европейской конференции по теории игр (08–10 июля 2015 года, Санкт-Петербургский государственный университет, Санкт-Петербург, Россия). Представленные тезисы относятся к теории игр и её приложениям.

Тезисы представляют интерес для научных работников, аспирантов и студентов старших курсов университетов, специализирующихся по менеджменту, экономике и прикладной математике.

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Plenary Speakers

Professor Hans Peters - University of Maastricht (Netherland)

Professor David Schmeidler - Tel Aviv University (Israel)

Professor Alexander Vasin - Lomonosov Moscow State University (Russia)

Professor Georges Zaccour - HEC Montreal (Canada)

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Nash equilibrium and where the conditions imposed in other equilibrium uniqueness results of the literature (e.g., that of Rosen (1965) or that of Karamardian (1969)) might not hold. Our analysis relies on notions of generalized convexity which, however, dispense with continuity assumptions on payoff functions. Indeed, we find sufficient generalized convexity conditions on "marginal utility" (understood as a type of Dini derivative) which guarantee equilibrium uniqueness when strategy sets are closed (and possibly unbounded).

Overconfidence, Imperfect Competition, and Evolution

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Keywords: *overconfidence, imperfect competition, product differentiation, evolution, market selection, biased beliefs*

This study explores whether market competition between firms owned and run by managers favors overconfident managers. We study this question in a linear duopoly setting with differentiated products. The main result is that when there is complete information about the competitor's type, evolutionary market selection forces will always favor a positive degree of managerial overconfidence. This result is robust to both the form of the strategic interaction and the nature of product differentiation. We also study the case of incomplete information about the competitor's type under quantity competition and show that evolutionary forces may still favor overconfident managers if market selection is driven by relative rather than absolute profit performance.

Forecasting demand for higher education using evaluation of professions' attractiveness

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Keywords: *forecasting, demand, higher education, economics of education, semantic analysis, entrant's selection*

The group working on a project in National Research University Higher School of Economics consists of Prof. Irina Abankina, Prof. Tatyana Abankina, Prof. Faud Aleskerov, Dr. Pavel Derkachev, Ludmila Egorova, Dr. Ludmila Filatova, Elena

Attractiveness of the life style and the image of profession transmitted through the media

Prospectiveness of profession transmitted through the media

Quality of education in profession

Accessibility of higher education on this professional program

Interest of society and the popularity of the profession transmitted in the media

Attention of the state, corporations and investors to the profession, the direction of training.

Scientific activity in the area, innovation, activity of experts

Government policies and programs

To assess the popularity of all professional programs we explored the media content for 2000-2014 and calculated how often the key phrases for each of the eight measures were mentioned in different media sources.

Based on these eight measures, three forecasts of future entrants' choices of professional programs were made. Each of these versions of the forecast shows that the "Engineering and Technical Sciences" is oversaturated by budget places Specializations in transportation, construction, energy and computer technologies have potential for growth of demand.

On some excess-based solution concepts of a cooperative game of pursuit

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Keywords: *group pursuit game, Nash equilibrium, cooperative game of pursuit, core, nucleolus, SM-nucleolus*

In this paper we study a group pursuit game with an evader and m pursuers acting independently of each other. The players move on a plane with bounded velocities. The game is supposed to be a non-zero-sum pursuit game with complete information. This game was formalized and investigated in [1].

We apply two different approaches to investigation of this game: the noncooperative and cooperative ones. As a noncooperative solution concept we consider a Nash equilibrium. For the cooperative case we construct a characteristic function for the game and give an analytical description of its core [2], [3]. We prove that the core is not empty for any initial positions of the players in the game. Moreover the core is time consistency.

In this work we consider two single valued solution concepts of a TU-game – the nucleolus [4] and the SM-nucleolus [5]. The nucleolus is always an allocation of the core. The SM-nucleolus is also an excess-based solution concept that takes into account