On Cournot dynamic multi-team game using incomplete information dynamical system

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Abstract:
In this paper, we study an incomplete information dynamical system. Then, we suggest a modification of this system and we applied it to the standard Cournot game. The equilibrium solutions and the conditions of their locally asymptotic stability for the static and the dynamic in monopoly and duopoly cases are studied. Also, we formulate and study the multi-team dynamic Cournot game. (C) 2012 Elsevier Inc. All rights reserved.

Keywords: Incomplete information dynamical system; Multi-team; Cournot game; Pareto optimality; Nash optimality
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Two-prey one-predator model

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Abstract:
In this paper we propose a new multi-team prey-predator model, in which the prey teams help each other. We study its local stability. fit the absence of predator, there is no help between the prey teams. So, we study the global stability and persistence of the model without help. (C) 2007 Elsevier Ltd. All rights reserved.

Keywords: PREY SYSTEM; IMPULSIVE PERTURBATIONS; COMPLEX DYNAMICS; CHAOS
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Multi-team prey-predator model

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Abstract:
Here, we apply multi team concept to the prey-predator model. The prey teams help each other. Local stability of the system is studied. Global stability and persistence of the model without help are investigated.

Keywords: multi-team; prey; predator; logistic model; global stability
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On Puu's incomplete information formulation for the standard and multi-team Bertrand game

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Abstract:
Pun's incomplete information dynamical system is introduced and applied for Bertrand Duopoly. Multi-team Bertrand game is formulated. It is a generalization of Liu's work to dynamical non-convex multi-team games. (c) 2005 Elsevier Ltd. All rights reserved.

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On multi-team games

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Abstract:
In this paper, we generalize convex static multi-team games to both non-convex and dynamic games. Multi-team dynamic Cournot, Hawk-Dove and Prisoner's Dilemma games are investigated. Puu's incomplete information dynamical systems are modified and applied to Cournot game. (c) 2006 Elsevier B.V. All rights reserved.

Keywords: non-convex multi-team games; multi-team Cournot; Hawk-Dove and Prisoner's dilemma games; Puu's incomplete information dynamical system
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