

## MODEL OF COLLECTIVE SPORTS GAMES

### **Abstract**

*Collective sports game in the substantive sense of a complex phenomenon in the real world and takes place in the implementation of the plan. The plan applies to players as the stakeholders and the structure of the environment. On multifaceted manner using scientific contributions areas such as sociology, linguistics, biology, mathematics, computer science, especially in the field of artificial intelligence, robotics and philosophy we have clarified the issues associated with this phenomenon, which eventually resulted in a model of collective sports games. The model consists of three basic components and these are: the player, the collective of the match. Model player is multifaceted and there layers emerge one from another. Layers model players: play, strategy, flow, global-tactics, positions, communication, local-tactics, stigmergy, technique games, player profile, playground, game rules and background. Model collectives based on the configuration of the player's position determined by the chosen tactics. Basic types of players by type are: goalkeepers, defenders, the midfielder / playmaker and attackers. Players are assigned roles during the game experiencing transformation whose dynamics is determined by possession, the area of the field (field) and the tactics of the game. The model matches we expressed a relation where the outcome is a function of the clash of two collective team tactics in a defined environment and according to set rules. Possession is a central parameter determining the behavior of the kind which can be an attack, transition and defense. Constructed model has the characteristics of modern ecological approaches and presents the research basis for the planning and design of new experiments in the field of kinesiology collective sports games. The research for this approach is transferred to the interaction of players, collectives and the environment.*

**Key words:** Sports, Model, Player Position, Collective, technique games, tactics, Game Plan, and Complex Systems, Communication, Stigmergy, Rules, Sport Science

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