

Kolloquium „Berner Gespräche zur Sportwissenschaft“

Montag, 22.05.2017, von 16.15 Uhr bis 17.45 Uhr

Hörsaal C001 (Universität Bern, ZSSw Gebäude C, Bremgartenstrasse 145, 3012 Bern)

Performance analysis for capturing the complexity of team synergies

Prof. Dr. Duarte Araújo is the director of the Laboratory of Expertise in Sport of the Faculty of Human Kinetics at University of Lisbon, Portugal. Araújo is the president of the Portuguese Society of Sport Psychology and a member of the National Council of Sports of Portugal. His research on sport expertise and decision-making, and affordances for physical activity has been funded by the Fundação para a Ciência e Tecnologia. Prof. Araújo published more than 100 papers in highly scientific journals mainly about expertise, team performance, variability, cognition and decision-making. Prof. Araújo supervises several doctoral students from Portugal, Italy and Australia and he has been invited worldwide to talk about expert performance. Duarte Araújo is a marathon runner



Team performance analysis has gained prominence in the last decade (Passos et al., 2017). In complex social neurobiological systems, self-organisation is the fundamental principle acting to bring order amongst the parts (Araújo, & Davids, 2016). The emergent coordination patterns in team sports are channeled by the surrounding constraints, as they structure the state space of all possible configurations available to the team game as a complex system. The interaction between constraints of the performance environment and each individual's characteristics allows opportunities for action to emerge. By means of tracked positional data, recent studies have started to reveal how players and teams continuously interact during competition, forming synergistic behavior. Developments in methods of analysis of expert team performance can benefit from a theoretical approach that situates and traces relevant team processes. Here we suggest ecological dynamics, which is an alternative that can guide the design of representative practice tasks where the evolution of the synergistic properties of team performance could be monitored.