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Titel abstract/symposium: Towards Smart Sports Exercises

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**TITLE** –Towards Smart Sports Exercises

**INTRODUCTION** – In the recently started Smart Sports Exercises project, new game forms and exercises for indoor volleyball sports practices are researched. This is done in a “smart indoor sports space”. The playing field will be modified through an interactive floor capable of displaying video and real-time graphics, that is equipped with unobtrusive pressure sensing capabilities. A specially developed training system will offer interactive exercises. Direct feedback will be provided on the actions and performance of individual athletes and the team, and exercises will be adapted to this as the training proceeds.

**METHOD** – In order to explore the potential for such exercises, we use an iterative method grounded in creative technology design. We interview players and trainers, refine early concepts based on their input, and organize user testing sessions with early, illustrative prototypes to elicit further requirements and ideas. After several rounds of this process, the insights that have been collected will feed into the future design and implementation of a final system which, towards the end of the project, will be

evaluated in collaboration with volleyball teams of different levels, in (youth) club training and physical education.

**RESULTS AND DISCUSSION** – In this presentation we discuss the outcomes of the initial interviews and co-design sessions. The resulting concepts for interactive exercises will cover a range from physical and technical exercises to tactics and strategy, will target a range from elite to youth volleyball, and are aimed at training individual skills as well as group skills and group patterns of volleyball behavior.