



Seminari di Dipartimento 2023

Venerdì 20 Ottobre 2023, ore 10:00 Edificio H3, aula 2B

**DSV** SEMINARS



## Virtual Reality Technology: Past, Present and Future

**Prof. Cathy Craig** 

Ulster University
CEO/Co-founder INCISIV Ltd.
Visiting Professor at University of Trieste

In this talk I will take you on a journey, showing how Virtual Reality (VR) Technology has evolved over the last 25 years. I will start by explaining why, in the early 2000s, we first turned to VR technology to understand differences in decision making between elite and novice soccer players. In short, VR is a very powerful tool that allows us to carefully control what the brain sees (perception), but also very accurately measure how the brain responds (action). The versatility of VR means it can be used to study human behaviour in many different sport and health applications. I will show how we have used VR to help us understand decision-making in elite sport but also conditions such as freezing of gait in people with Parkinson's disease.

I will then demonstrate how the recent evolution of both VR hardware and software has opened exciting new possibilities to take our research from the lab so it can make a difference to people's lives. I will show how, through INCISIV, we have developed VR applications to help train perceptuo-motor skills in the comfort of your own home, but also help elite sports organisations, such as the Italian rugby federation, measure players' neural fitness and monitor changes that occur as a result of injury.

I will finish by sharing some thoughts on the future of VR technology and the Metaverse and highlight opportunities for psychologists and researchers interested in human behaviour to take advantage of this technology.