

What your move say about (the social) you when interacting with human and artificial agents

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When: Wednesday 23 March 2021, 2pm to 4pm CET

Where: Scuola Superiore Meridionale, Classroom 4. Broadcast on Zoom.

<https://us02web.zoom.us/j/89062738122?pwd=bWJkNlVQeWc4VzdZc1ROQ3VLTUwrZz09>

Meeting ID: 890 6273 8122

Passcode: ssm_zoom

Abstract: In this seminar, I will emphasize the informational nature of human synchronization, together with its consequences for the understanding of how the way we move in a social context reveals who we are. The notion of Individual Motor Signature (IMS) will be presented, reducing to one low-dimensional variable the interaction of multiple degrees of freedom at various levels of the human body. A novel way to evaluate how these signatures are influenced, when interacting in a dyad or in a group, by morphological and movement similarities, emotional qualities, and social competences, will be introduced. I will present a recently developed digital architecture that modulates IMS in real-time during social interaction with humans and artificial agents (avatars and robots), and I will show how this architecture can be used for rehabilitation, sport performance, and the design of multi-agents environments.

Support publications: Bienkiewicz, M., Smykovskyi, A., Olugbade, T., Janaqi, S., Camurri, A., Bianchi-Berthouze, N., Björkman, M., & Bardy, B.G. (2021). Bridging the gap between emotion and joint action. *Neurosciences & Biobehavioral Review*, 131, 806-833.
<https://doi.org/10.1016/j.neubiorev.2021.08.014>

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Bio: Benoît Bardy is Professor at the University of Montpellier in France, member of the Institut Universitaire de France, and the founder of EuroMov, a multidisciplinary research and innovation centre at the crossover between Movement, Health, and Digital Sciences. His research focuses on synchronization — between human and artificial agents, between biological systems, and between the senses — and on related technology-oriented solutions for health and wellness. Benoît has coordinated several European, national, and regional initiatives, and he is an expert for the European Commission and the private sector.

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