



Università
degli Studi di
Messina

DIPARTIMENTO DI SCIENZE BIOMEDICHE,
ODONTOIATRICHE E DELLE IMMAGINI
MORFOLOGICHE E FUNZIONALI



Seminari di Dipartimento BIOMORF – Ciclo 2022/1

Nel quarto ciclo di seminari abbiamo dato spazio ai Visiting Professor e Researcher invitati da membri del Dipartimento. L'obiettivo rimane quello di dare visibilità alla ricerca dipartimentale, in particolare alla sua dimensione internazionale, e di fornire un'occasione di interazione scientifica aperta a tutti i ricercatori dell'Ateneo.

Mercoledì 27 aprile 2022, Ore 17.00 – 18.00
Aula Magna "Mario Teti" della Torre Biologica (Pad. G)

PRESENTAZIONE DELL'EVENTO

Prof. Sergio Baldari

(Direttore Dipartimento BIOMORF)

Prof. Andrea d'Avella

(Coordinatore Commissione Ricerca e Terza Missione BIOMORF e proponente del Visiting Researcher)

RELATORE

Prof.ssa Dagmar Sternad - Visting Researcher

Departments of Biology, Electrical and Computer Engineering and Physics, Center for the Interdisciplinary Study of Complex Systems Northeastern University, Boston, MA, USA

Movement (Dys-) Coordination: A Computational Approach as Foundation for Clinical Insights

Our daily activities involve a host of highly dexterous skills, ranging from tying shoelaces to leading a cup of coffee to one's mouth to drink. The challenge of such seemingly mundane actions becomes manifest in people with neurological disorders when they pose an insurmountable challenge to independent function. Current physical rehabilitation practice is still guided by therapists' experience and intuition, because fundamental insight into control and coordination even in healthy people is still very limited. Our research pursues fundamental questions in sensorimotor coordination with a view to better understand atypical motor control.

This talk will review several lines of research on upper-limb motor tasks involving interactions with objects. A first study will show how humans deal with their inherent variability and noise to achieve accurate goal-directed actions, such as throwing a ball to a target. A second line of research examines how humans interact with a complex object, such as a cup filled with coffee. Several experiments show how humans handle the object to achieve predictable and safe solutions. Insights on variability, predictability and prediction in healthy humans will serve as platform to shed some light on dyscoordination in individuals with dystonia, stroke, and autism.

Sarà possibile seguire l'evento anche sul Team "[Seminari BIOMORF](#)" (codice **r00tueq**)