Environments of Actuation: Subjectivity in the Age of Neuro-somatic Technologies
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This talk explores subjective experience within technical systems offering cognitive and sensory enhancement to human agency. By bio-informational environments, I mean artificially intelligent systems *that sense, process, and act upon neuro-somatic data in real-time,* but importantly, *mediate* experience both epistemically and ontogenetically. It interrogates how emerging neuro technologies and emotion-sensing devices, location-aware tracking systems, and predictive algorithms reshape the nature of consciousness and phenomenal experience. Traditionally passive spaces of human activity are transforming into data-intensive environments of actuation, scaffolding new forms of awareness, cognition, and agency. Some examples include: in-cabin automobile systems that advise drivers on safety advice based on their heart rate, facial micro-expressions, respiration rate, blood pressure etc., DARPA's mind-controlled helmets that use non-evasive neurological links that let fighter pilots carry out sophisticated tasks and fire weapons, digital signage that provide customers personalized recommendations based on their biometric signals and purchase history, and museums offering customized art experiences to visitors based on their neuro-somatic responses. The talk asks to what degree are experiential qualities in these environments now pre-determined by neuro-somatic technologies, rather than being shaped by external experiences?