



**European Neuroscience Institute Göttingen**

**Dr. Julia Sliwa**

The Institut du Cerveau et de la Moelle épinière  
– ICM (Brain & Spine Institute) , Paris

## **From agents, to actions, to interactions: primates' brain networks for social processing**

Our brain continuously decodes the complex visual scenes unwinding in front of us: both the nature of material entities, such as individuals and objects, and their immaterial interactions. I will briefly talk about recognition of individuals by monkeys and next turn to social scenes and interaction processing by humans and monkeys. Interactions are fundamental in that they reveal hidden properties of intentional agents, such as their thoughts and feelings and of objects, such as their mass or material. Where and how interaction analyses are implemented in the brain was unknown. Using whole-brain functional magnetic resonance imaging in macaque monkeys, we discovered a network centered in the medial and ventrolateral prefrontal cortex that is selectively engaged in social interaction analysis. Two additional networks, a parieto-premotor and a temporal one, exhibited both social and physical interaction preference, which, in the temporal lobe, mapped onto a fine-grain pattern of object, body, and face selectivity. Extent and location of a dedicated system for social interaction analysis in monkeys suggest that this function is an evolutionary forerunner of human mind-reading capabilities

**Thursday, June 6th 2019, at 15:00**

**ENI, seminar room 2<sup>nd</sup> floor**

Contact: [c.schwiedrzik@eni-g.de](mailto:c.schwiedrzik@eni-g.de)