COST Action IC1205 on Computational Social Choice: STSM Report

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Host:	Prof. Salvatore Maria Aglioti
Host institution:	Sapienza University of Rome
Host country:	Italy
Dates:	01/09/2015 to 17/09/2015
STSM Title:	Learning to Trust in Political Leader
	(Application of Reinforcement Learning in an Iterated Trust Game)
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The short term scientific stay was carried out at the Laboratory for Social and Cognitive Neuroscience - Faculty of Medicine and Psychology, Sapienza University of Rome. The research was conducted under the auspices of COST Action IC1205 and was based upon three hierarchical pillars of organization:

- Academic Coordination with MK MC Member Prof. Ana Madevska Bogdanova and the Chair Prof. Britta Dorn

- Research Collaboration with fellow lab members Dr. Giuseppina Porciello and Dr. Marco T. Liuzza

- Scientific Supervision, guidance and support by Prof. Salvatore Maria Aglioti.

The work represented follow-up on the PhD research activities, revolving generally around the area of Neuropolitics where special emphasis was placed upon the investigation of personality and neural foundations of ideological divide, group distinction, social decision making and economic behavior. The work specifically involved the topic of computational social choice through application of reinforcement learning models in the political context. Namely, right and left oriented partisans were engaged in a repeated economic exchange with a figure of famous political leader (as opposed to a control) in a Trust game. In such setting, the participants were playing in the role of the trustors, the leader was assigned a role of the trustee, and the economic decisions in form of monetary offers were indicators of trust. The aim was to investigate trustworthiness as fairly dynamic construct by configuring several reinforcement learning algorithms: gain-loss (baseline), confirmation bias, trust decay and dynamic belief. The next phase will include model testing and selection of best-fitted model in order to provide plausible explanation of our data.

The STSM enabled natural progression of explorations within the PhD curriculum, in order to extend the research activities beyond the scope of the thesis and expand the existing knowledge on the topic of interest. The outcome of such opportunity will be effectuated in series of presentations and summarized in a scientific publication.