

COST Action IC1205 on Computational Social Choice: STSM Report

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Host institution: Hungarian Academy of Sciences

Host country: Hungary

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During my stay in the Hungarian Academy of sciences (located in Budapest), I have worked with Péter on the definition of new exchange problems. We worked on a plan of research to extend works that we have both independently performed during the recent years. This plan includes the generalization of exchange rules which have shown some interesting properties in a setting where the market does not contain two copies of the same items. We believe that such exchange rules can be generalized in order to cope with a more realistic situation where multiple copies of the same item can belong to the market. Such consideration would also increase the efficiency of the market.

We also discussed with Péter on another problem that Péter is studying in collaboration with Haris Aziz of the Data 61 research group in Sydney. This problem is a many-to-many matching where the agents have restricted preferences over the exponentially large combinations of possible matchings. We are interested in studying the complexity of finding a core matching for various restriction on the preferences of the agents.

During my stay in Budapest, I had also the opportunity to present, in the Game Theory seminary conducted by Peter's research unit, recent works that I have performed with Japanese colleagues of the Kyushu University. This seminary gave me the chance to exchange with economists about this work which was mainly led by computer scientists but which contains some classical notions in economy.

I thank the COST Action for the opportunity to make this visit.