COST Action IC1205 on Computational Social Choice: STSM Report
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Dates: 09-03-2016 to 20-03-2016

During my visit to University of Oxford I closely worked with my host, Prof. Elkind. Our main discussion was about Trembling Hand equilibria for Voting games, precisely, to Voting games under Plurality. The main adeas and results are as follows.

Trembling hand (TH) equilibria were introduced by Selten in 1975. Intuitively, these are Nash equilibria that remain stable when players assume that there is a small probability that other players will choose off-equilibrium strategies. This concept is useful for equilibrium refinement, i.e., selecting the most plausible Nash equilibria when the set of all Nash equilibria can be very large, as is the case, for instance, for Plurality voting with strategic voters. In this paper, we analyze TH equilibria of Plurality voting.

We find an efficient algorithm for computing a TH best response and establish many useful properties of TH equilibria in Plurality voting games. On the negative side, we found an example of a Plurality voting game with no TH equilibria, and showed that it is NP-hard to check whether a given Plurality voting game admits a TH equilibrium where a specific candidate is among the election winners.

Additionally, we considered Candidacy games under restricted domains and obtained a few preliminary results in this direction too.