

COST Action IC1205 on Computational Social Choice: STSM Report

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During my STSM I spent three weeks at the Institute of Logic, Language and Computation at the University of Amsterdam. I was hosted by Ulle Endriss with whom I worked regularly. The purpose of STSM was to explore the model of iterative voting under approval voting rule. The settings are similar to Meir et al., AAI-2010: there is a group of agents who must choose one alternative out of many. Agents have strict preferences over alternatives, which are their private information. The voting procedure is iterative: all agents vote and then only knowing the result, may change their votes one at a time in a random order. The process stops when equilibrium is reached, i.e. when no agent wants to change her vote anymore. In case of approval voting, there can be a set of winning alternatives rather than a single alternative, therefore, an agent's incentives to change her vote will depend on the assumptions by which agents extend their preferences over individual alternatives to preferences over sets of alternatives. The preliminary results: under certain assumptions regarding the voters' preferences over sets of alternatives and a random tie-breaking rule, the process always stops with a Condorcet winner chosen, if it exists. The proof of this result for the general case of n agents and m alternatives is in progress.

During my research visit I regularly participated at the Computational Social Choice local seminars at ILLC, where I gave a talk on the 4th of November. Also during my STSM, I had a pleasant opportunity to attend the Dutch Social Choice Colloquium at the Erasmus University of Rotterdam and to listen to interesting talks on committee decision making.

Overall, the three weeks spent at ILLC were fruitful and I am very thankful to my host Ulle Endriss and to COST Action IC1205 for giving me this opportunity.