

COST Action IC1205 on Computational Social Choice: STSM Report

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Host institution: Corvinus University of Budapest

Host country: Hungary

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During my research visit at the Corvinus University of Budapest I was hosted by Prof. Attila Tasnádi, with whom I worked closely and regularly. The purpose of the visit was to study the complexity of influencing the voting process in majoritarian institutions through bribery under complete information settings. With the helpful comments and suggestions of my host, I could determine how hard it is for an external interested party to get its preferred outcome chosen: what is the minimum number of voters needed to be bribed, so that by changing their initial preferences, the interested party can get its preferred alternative chosen; and what is the amount to be paid to those voters.

Also during my research visit, I had an opportunity to start collaboration on a joint paper of myself, Prof. Attila Tasnádi and his colleague Dezsó Bednáy, entitled "Are least dictatorial rules advisable?". In this work we look at least-dictatorial voting rules. In order to define the least-dictatorial rule, we use a distance function (e.g. Lerer and Nitzan 1985; Elkind et al. 2015), which is defined by the number of profiles for which two social choice rules choose different alternatives. The least-dictatorial rule is the rule for which this distance measure is the greatest for the closest dictatorial rule, therefore, this rule is the furthest away from the closest dictatorial rule. As our first result, we wanted to see, if the least-dictatorial rule lies in the combination of inverse dictatorial rules, i.e. the rules that choose the worst alternative of a dictatorial rule. Surprisingly, we find that the combination of inverse dictatorial rules is in fact not a least dictatorial one. There are many open questions left, on which we continue working.

During my research visit I regularly participated at the Game Theory seminar series of Corvinus University of Budapest, where I also presented my research paper. I received many comments and suggestions by the seminar participants.

I am very grateful to COST Action IC1205 for giving me this opportunity and to my host, Prof. Attila Tasnádi, for the hospitality.