

# COST Action IC1205 on Computational Social Choice: STSM Report

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**Host:** William Thomson  
**Host institution:** University of Rochester  
**Host country:** USA  
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During my three-week visit at the university of Rochester I had several interesting meetings on an (almost) daily basis with my host William. During these, we mainly discussed the following two matters.

First, my work with my advisor in Lausanne, Bettina Klaus, where we look into the case that agents have single-peaked preferences over locations on a one-dimensional space, and a set of these locations must be selected. This work is split into two different projects.

(i) In the first project, the properties of *efficiency* and “*solidarity*”<sup>1</sup> are considered and target set correspondences are characterized. William proposed many changes to be made in the working-paper version of this project. The changes mainly concerned the language and presentation of the project. After implementing most of these changes, the clarity of the paper and the exposition of its results was greatly improved. Moreover, I am certain that this “language and layout training” will be of great value to me in all future projects I will take part in.

(ii) In the second project, which is on-going, the property of *strategy-proofness* has a central role while the properties of *anonymity* and *efficiency* are also considered. With William, we discussed the theoretical and practical consequences these properties would have in the project as well as different extensions that should be looked into. He also provided me with some references in the recent literature that I was not aware of.

Second, we discussed some aspects of William’s work. These included a one-dimensional, two-agent model, where one agent has single-peaked preferences and the other agent has single-dipped preferences. I found this particular project very interesting and in the future I am likely to work on something similar.

During my stay, I also had the opportunity to present both projects I am working on at William’s weekly student seminar. There, I received some very good feedback on my projects’ content and on my presenting style, both from William and from the students present.

Last but not least, I should mention my participation at William’s course on micro theory, that is provided to second year students at Rochester’s doctoral program. I found the course very helpful in giving students a “grounds-up” knowledge into the theory of allocation problems (and secretly wish something similar was provided in Switzerland).

Overall, I am very grateful that the COST action supported my stay in Rochester and enabled this invaluable learning experience.

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<sup>1</sup>Specifically, the properties of *replament-dominance* and *population-monotonicity*.