

COST Action IC1205 on Computational Social Choice:

STSM Report

Applicant: Eric KAMWA

Home institution: University of Caen

Home country: France

Host: Hans PETERS

Host institution: Maastricht University

Host country: Netherlands

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During my visit at Maastricht University, I worked closely and on a regular basis with my host, Professor Hans Peters. The purpose of the stay was to find other paths for the analysis of committee selection with a particular attention paid to stable rules. A committee is fixed-size subset of alternatives chosen from a larger set. A voting rule is said to be stable if it always select a committee such that none of its member is beaten in pairwise comparisons by any outside candidate.

As a first step in the characterization of the stable rule, my host suggested me to look on their strategyproofness. For this, Prof. Hans introduce me to a voting rule a never heard before: the *Feasible Elimination Procedure* (FEP). This rule has been proposed by Peleg with whom Prof Hans has an ongoing paper on how this rule can be suitable for selecting committees. We have discussions on the stability of the FEP; what comes out is that the FEP seems to be non stable. We tried to find how the weights used to defined the FEP can be designed in order to make this rule become Condorcet consistent and/or stable. We didn't have a enough time to go deeper in this study. This task will keep us in collaboration with the hope that we could come out with some new results.

Although the stay was very short, I think, it was very fruitful. My host also allowed me to have some discussions with two PhD students who are working on the field of the social choice theory. The discussions I had with Burak Can were also fruitful.