COST Action IC1205 on Computational Social Choice:
STSM Report

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- **Host institution**: London School of Economics
- **Host country**: Great Britain
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The purpose of my visit to London School of Economics was a joint research with Nicholas Baigent on the topic of ranking violent conflicts. Our previous research on the relationship between identities and violent conflict raised the issue of comparing violent conflicts, i.e. ranking violent conflicts with respect to the extent of violence they contain. Our starting point was the existing literature on ranking sets of objects employed in the theory of choice. The problem of ranking violent conflicts is reduced to the problem of ranking subsets and we extended it to a problem of ranking multisets/functions/vectors. In particular, we adapted the well-known Barbera-Pattanaik impossibility result on ranking sets of objects based on the ranking of single elements of a set for our purpose. This approach turned out to be limited in the sense that we were able to rank violent conflicts only if they contained non-repeating violent acts. Therefore, we worked on a new approach: a characterization of the so called Weighted Sum Ranking. Weighted Sum Rankings assign numbers to individual violent acts, possibly in a non linear way, and multisets/functions/vectors are then ranked according to the sum of the numbers assigned to the individual acts in the multisets/functions/vectors.

During my visit to the LSE I also participated in the Conflict Research Group seminars where I also had the opportunity to present a part of my and Nick's work. I also met some of the members of the Choice Group. This was an opportunity to meet and work with colleagues conducting research in same or similar areas. One possible outcome of these meetings is a joint future research project with some of the members of the Choice Group.

Finally, I would like to thank the COST office for giving me this opportunity!