

Vincenzo Dimonte's Scientific Report for an ESF Short Visit Grant

March 30, 2011

1 Purpose of the Visit

Participation at the Young Set Theory Workshop, 2011 in Königsberg, from 21st to 25th March. The aim of the visit was threefold: attending tutorials from prominent senior researchers, participating in discussion sessions with fellow colleagues and following talks by Post-Doc students.

2 Description of Work Carried Out During the Visit

The work has been carried out exactly as planned in the purpose of the visit. I followed with particular interest Prof. Joel Hamkins' tutorial on Boolean Ultrapowers and Prof. Ali Enayat on models of Set Theory. I attended all Post-Doc researchers seminars and I participated in the afternoon discussions. It is noteworthy that I had the possibility to lead one of these discussions, that was concentrated on very large cardinals, my field of research. More generally, I had the possibility for the whole week to talk with colleagues about a wide range of topics related to set theory (more practical matters included, like the job possibilities in other countries).

3 Description of the Main Results Obtained

My formation has benefited greatly from this visit. I feel that my comprehension (at least at an intuitive level) of several subjects is improved, and I gathered ideas for my future work. For example, I want to check with more attention the inner model definition of the sharp operator, to see if it

can give hints on how to prove indestructibility results on very large cardinal hypotheses. I received many advices and references on how to continue my study on these matters. I've also noted an interest among young set theorists on very large cardinals, especially because the publications on this subject are rare, so I think that my participation contributed to make this topic more known, and there is the possibility that someone will continue a personal research in this field.

4 Projected Publications/Articles Resulting from the Grant

There cannot be a publication/article that fully result from the grant. However, this experience will be a solid base for future developments.