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My visit to the Physics Department of the University of Helsinki, supported by the ESF short visit grant within the ESF activity „Holographic methods for strongly coupled systems“, was successfully carried out from May 17-24, 2015. The main goal of the visit was to facilitate the collaboration and scientific cooperation on the project „Quasi-normal modes and anyonic correlations in holographic metals“, and to discuss in detail possible future projects.

During the visit, significant progress was made concerning the computation of quasi-normal modes in the so-called electron cloud background. We fully expect to publish the results from this collaboration with the next one or two months [1].

Furthermore, the short visit grant made it possible to discuss in detail - through a seminar and subsequent discussions - several ongoing and future research projects, such as the effect of inverse magnetic catalysis (IMC) at finite temperature and quark chemical potential in various holographic models, and certain aspects of cold and dense holographic matter (CDHM) in the Sakai-Sugimoto and Klebanov-Strassler backgrounds.

In conclusion, it is clear that the realisation of the ESF short visit grant was very fruitful and will lead to at least one publication and future collaborations.

[1] B. DiNunno, M. Ihl, N. Jokela and J. Pedraza, ` Quasi-normal modes and anyonic correlations in holographic metals“, to appear.