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Scientific Report

During my visit to the Department of Mathematics of the University of Genoa (Italy) I collaborated with Professors Bruzzo and Bartocci, in the preparation of a book entitled “Fourier-Mukai and Nahm transforms in geometry and Mathematical Physics” which will be published by Kluwer.

In particular, during my visit we have carried out the following tasks:

- 1) Discussion and writing of an appendix devoted to lattices.
- 2) Preparation of the sections about “Notes and further reading” of the different chapters of the book, with the corresponding bibliographic references.
- 3) Discussion about Fourier-Mukai partners of algebraic surfaces. This has been a long scientific discussion considering the various possibilities for the exposition of the topics. Some new approaches have been founded.
- 4) Discussion about equivariant Fourier-Mukai transforms and some of their applications.

The visit has been very fruitful, and has had a great impact in order to speed the finishing of the book.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'D. Hernández Ruipérez'.

Daniel Hernández Ruipérez
Professor of Geometry
and Topology