

## **Scientific report visit Andrew Jaffe**

During my visit to the University of Leiden, I pursued several projects with staff, postdocs, and students. With Professor Elena Sellentin and her students in Maths and the Observatory, I continued our ongoing cosmology data analysis project involving the Almanac code which we have developed over several years, concentrating on its abilities to model the cosmological likelihood function. These projects significantly pushed PhD students Javier Silva and Kutay Nazli towards finishing their PhD theses. With Prof Konrad Kuijken and others such as Professor Henk Hoekstra, I discussed and began work on integrating Almanac into the Euclid satellite project as well as other projects with and many discussions about new and coming Euclid weak lensing data. With Divya Rana and Konrad Kuijken, we began to investigate possible systematic errors that could be responsible for recent indications in galaxy data that the Universe may be described by a non-standard (and theoretically surprising) dark energy model for the history and evolution of the Universe in relatively recent times. I look forward to continuing these investigations with the Sterrewacht Personnel in the future.