

SWIFT Users & Developers meeting 2022

Scientific Report

The 2022 edition of the SWIFT users & developers meeting was held in Leiden during the week of the 14th of November. 45 attendees joined the meeting with collaborators travelling from the UK, Belgium, Switzerland, Australia, Argentina, and the US. The presentations focused on the code developments that took place in the last three years. These are clustered in three main areas: improvements to the hydrodynamics schemes, ports of parts of the code to new hardware, and the specialisation of the code for so-called zoom-in simulations. Afternoons were dedicated to working in groups. The years of pandemic had minimized contact between developers and these discussion sessions have kick-started new ideas for code changes and future ideas. Rejuvenating the collaborative spirit after three years of online chats has been the main goal of this workshop and we achieved this, with already new developments in small groups taking place. The workshop also included a beginners' introduction to the numerical method on the first day. This also attracted participants from Leiden Observatory not typically involved in the running of simulations. Attendees learnt the basic principles of the Smooth Particle Hydrodynamics method and ran their first numerical simulations.