The MONSOON project continued the development of the Serpent Monte Carlo code. Methodology used for producing group constants for nodal diffusion codes was finalized and verified. Development of a new nodal solver "Ants" as part of the Serpent-based computational framework "Kraken". The development effort is continued in the LONKERO project of SAFIR 2022.

Serpent user community

The Serpent code has a large international user community consisting of more than 900 users in 200 universities and research organizations in 42 countries around the world. Interaction and close collaboration with Serpent users has been an important part of the MONSOON project as well. Forms of interaction include discussion forum, Serpent wiki, and annual international user group meetings organized since 2011. The 8th Serpent UGM was hosted by Aalto University in Espoo in May 2018.

Highlights

- The MONSOON project continued the development of the Serpent Monte Carlo code.
- Methodology used for producing group constants for nodal diffusion codes was finalized and verified.
- Development of a new nodal solver "Ants" was started as part of the "Kraken" computational framework.
- Serpent user community grew to more than 900 users in 200 organizations in 42 countries around the world.