

# Advanced computer simulations methods for neutron scattering instruments 2025



#### Welcome



- Inspired by ORNL symposium
   Advancements in Simulating Neutron
   Scattering Instruments and Experiments
- Intent with workshop
- Academia points for young scientists
- Closer collaboration within community
- Delighted to see this many register

Advanced computer simulations methods for neutron scattering instruments 2025



## ESS Modelling group at DMSC



- Simulations
- McStas: Monte Carlo Ray-tracing
- NCrystal: Thermal neutron scattering kernels





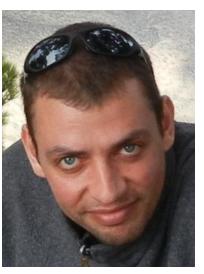




Peter Willendrup



Mads Bertelsen

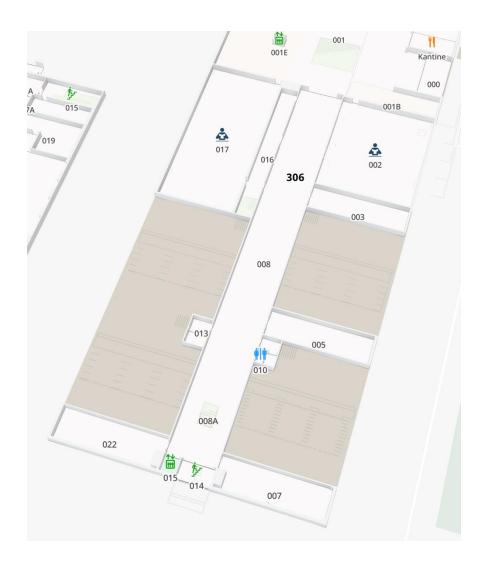


Thomas Kittelmann



Torben Nielsen

### Practical



Welcome and packages

Mads Bertelsen

Break (15 min)

Software and digital twins

Peter Willendrup

Lunch (45 min)

Use cases and development

Jan Saroun

Break (20 min)

New capabilities

Thomas Kittlemann

Posters (80 min)

### Future



- Want discussion and feedback on how to continue these workshops / conferences
- Combine with training? How frequent?



#### Future



- Want discussion and feedback on how to continue these workshops / conferences
- Combine with training? How frequent?
- Volunteers for cleanup would be highly appreciated
- Restaurant Flammen 19:30 tonight
   Buffet with meat and salad options
   Address: Nyropsgade 2, 1602 København



