# on Optics Highlights struments



EUROPE SPALLAT SOURCE

Ken And

ODIN Imaging Instrument accepted Broadband SANS Instrument accepted

- Compact SANS Instrument rejected
- Macromolecular Crystallography Instrument under discussion
  - expect decision tomorrow
- Start phase 1 of construction projects in January 2014
  - waiting for Steering Committee approval
- Phase 1 main deliverable: Preliminary engineering design
  - Functional requirements fixed
  - Most engineering solutions chosen
  - Plans for sample environment, support labs, commissioning
  - Instrument budget fixed

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Presentations at IKON5 25-26/9/13

Proposal submission deadline 31/10/13

- Internal proposal reviews: ESS management
- Internal technical reviews: neutron optics, choppers, detectors, etc.
- Proposal hearings in December-January
  - One hearing per proposal (organised by instrument class)
  - chaired by STAPs
  - presentation of proposals
  - presentation of internal reviews
- STAP submits preliminary review 20/2/14

Proposal resubmission deadline 31/3/14

- sent to STAP for final review
- Final review sent to ESS management, proposers, SAC

SAC meeting in May

- recommendations on instruments for construction
- Steering Committee meeting in Autumn
  - decision

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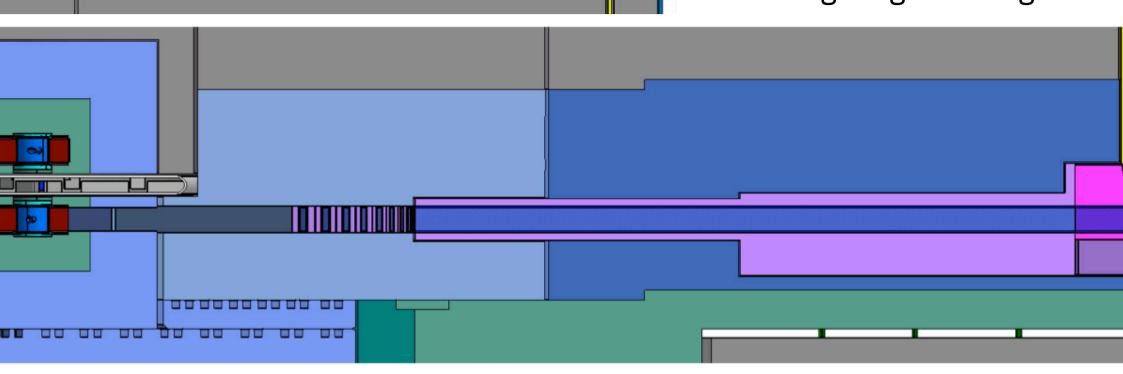
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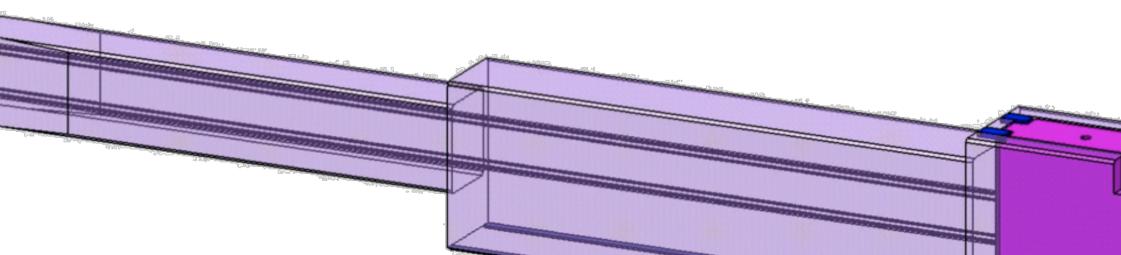
### <u>16 Construction Proposals expected:</u>

General-Purpose Polarized SANS (D), Compact SANS (DK-CH)

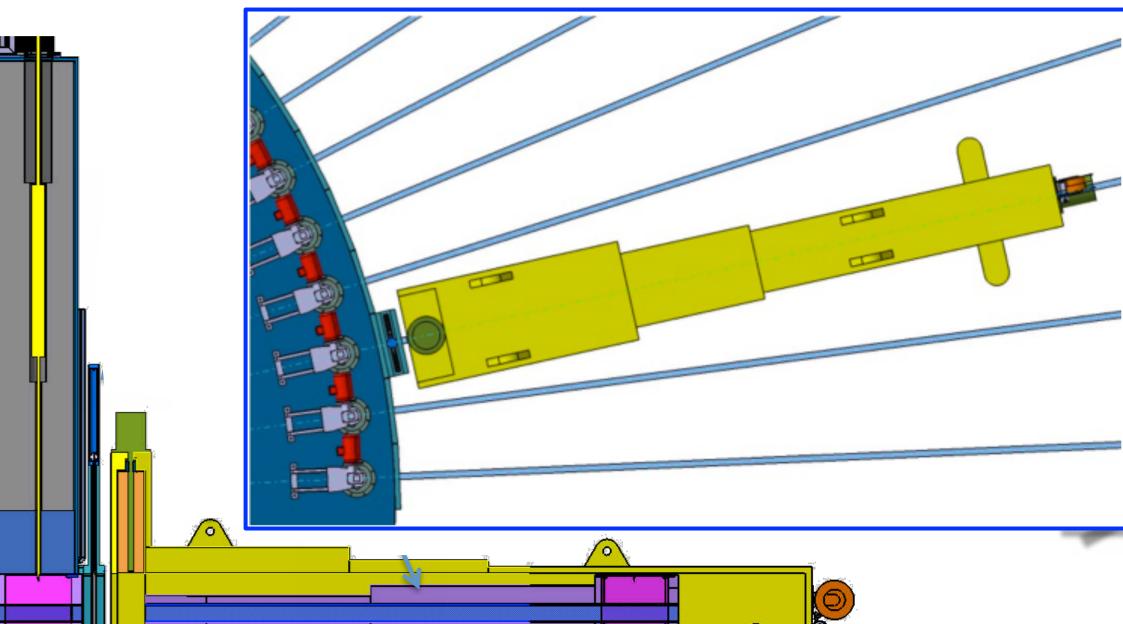
- Conventional Liquids Reflectometer (D), Freia Liquids Reflectometer (ESS), Conventional Magnetism Reflectometer Selene Magnetism Reflectometer (DK-CH)
- Bispectral Powder Diffractometer (D), Crystal-Monochromate Powder Diffractometer (ESS), Hybrid Diffractometer Heimdal CH)
- Engineering Diffractometer (D-CZ)
- Cold Chopper Spectrometer (D), Multichromatic Bispectral Chopper Spectrometer (D), Wide Bandwidth Chopper Spectrometer (ESS), Time-Focusing Chopper Spectrometer Tempus Fugit (IT)
- Crystal-Analyser Spectrometer Camea (DK-CH)
- High-Resolution Spin-Echo Spectrometer (D)

- optimize performance for neutron beam attenuation
  - allow beamport activation without dirassembling neighbouring instru



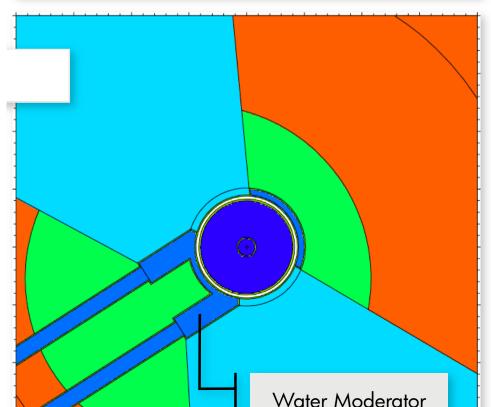


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- Pancake moderators
  - Reduce moderator height to >15mm
  - Up to factor 3 increase in source brightness
  - Redesign of guides
  - Not all instruments benefit equally
    0.4 m × 0.4 m

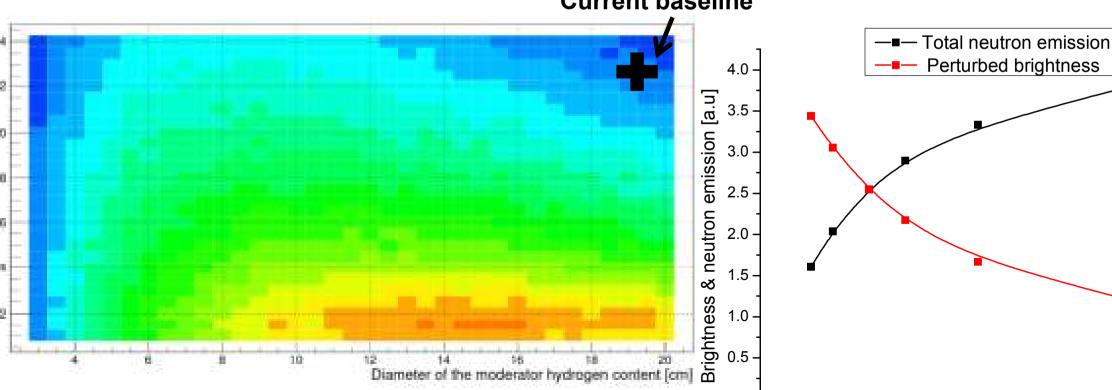
|  | Hydrogen Mc | derator |
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#### **Current baseline**

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