

**BIG SCIENCE
SWEDEN** JOIN US IN BUILDING
THE BIG SCIENCE ECOSYSTEM
CONFERENCE
2020
VIRTUAL CONFERENCE
NOVEMBER 24, 2020



Diagnostics

Session 1: Upcoming opportunities and Swedish initiatives in diagnostics

Session 2: The European ecosystem for diagnostics: How do we best work together?

ITER and fusion is important for Sweden



- ITER high-level meeting in Stockholm June - 19
- Academia, industry, government for a stronger Swedish contribution
- International collaboration is necessary for Sweden
- Big Science Sweden - take action!

Swedish strengths and focus in fusion technology

Based on research, contributions to JET, ESS, industrial strengths and facility plans.

Materials and production methods

- Industry in nuclear, steel and advanced materials.
- Expertise, testing and qualification in institutes.
- Applied research in universities - KTH, Chalmers

Diagnostics and modelling

- Neutrons - Uppsala university (JET, collaborations ITER)
- Optics - RISE and industry
- Electronics - ... space technology
- EUROfusion projects on plasma modelling

Complex construction projects for Science

- Successful alliance contract implementation at ESS
SKANSKA, Fagerström, AFRY, Sweco, Scanscott, ...

The DONES facility

- ESS expertise in design and construction of accelerator, target and conventional facilities
- Industry involved in ESS construction
- Studsvik expertise and operations in hotcell

Sweden has relevant expertise and industry for diagnostics - interested in collaboration and business



- Optics, electronics, neutrons, nuclear, technology, detectors, sensors, ...
- Design, prototyping, manufacturing
- Components and systems
- No active large industrial technology integrator

Agenda

Upcoming opportunities and Swedish initiatives in diagnostics

- Introduction to the ITER diagnostics to be supplied by EU – Christian Ingesson, F4E (25 min)
- Swedish capabilities in diagnostics – Sven-Christian Ebenhag, RISE (15 min)

Short questions after presentations, discussion in session 2.

This session will be recorded.

Support and helpdesk: Cajsa +46 705 09 29 32 Frida +46 761 44 33 81

Introduction to the ITER diagnostics to be supplied by EU

Christian Ingesson, Fusion for Energy

Swedish capabilities in diagnostics

Sven-Christian Ebenhag, RISE

**BIG SCIENCE
SWEDEN** JOIN US IN BUILDING
THE BIG SCIENCE ECOSYSTEM
CONFERENCE
2020 VIRTUAL CONFERENCE
NOVEMBER 24, 2020



Diagnostics

Session 1: Upcoming opportunities and Swedish initiatives in diagnostics

Session 2: The European ecosystem for diagnostics: How do we best work together?

Agenda

The European ecosystem for diagnostics: How do we best work together?

- IDOM and diagnostics – Maitane Amarika Aranberri, IDOM (15 min)
- BERTIN and diagnostic – Jean Baptiste Haumonte, BERTIN TECHNOLOGIES (15 min)
- Discussion - how do we best work together?

This session will be recorded.

Support and helpdesk: Cajsa +46 705 09 29 32 Frida +46 761 44 33 81

IDOM and diagnostics

Maitane Amarika Aranberri, IDOM

BERTIN and diagnostics

Jean Baptiste Haumonte, BERTIN TECHNOLOGIES

Discussion

How do we best work together?

- Market survey from F4E : OMF - 1126 - manufacturing for diagnostics systems
- What is needed to become a successful subcontractor?
- How can Big Science Sweden help? F4E? Others?