

7

Breakout Sessions

- *Magnetism*
- *Biology*
- *Functional Materials*



Early Science Breakout Sessions



Purpose

To identify science cases and experiments that will make best use of the facility flux, instrument capability and sample environments available during the early science program.

- Experiments leading to 'quick publications'
- Experiments demonstrating what ESTIA can do
- Experiments pushing the limits of feasibility

- We ask for you to keep relevance in mind:
 - Samples exist (or are proven) and are well-characterized
 - Known signal existence (sample should have seen neutrons before)
 - Analysis team exists

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Types of Experiments

- Benchmarking Experiments: (before Early Science)

Exemplary samples previously studied with neutrons & used to benchmark ESTIA. Samples may (or may not) be of novel scientific interest.

- Demonstration Experiments: (Early Science – day 1)

Used to demonstrate the performance of ESTIA. Low risk, high reward. Samples should be of novel scientific interest. Samples should have seen neutrons before.

- Challenging Experiments: (Early Science – not day 1)

Used to push the boundaries/feasibility of the instrument/technique. High risk, high reward.

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Rules of Engagement



- For the benchmarking experiments, a common consortium will be established where each person who contributes will be a co-author on any resulting paper.
- For the early science experiments, we work on a more case-by-case basis, where the decision to share data and collaborate lies with the main proposer.
- For all experiments, people on the beamline and people analyzing the data shall be a co-author on any resulting paper.
- Unless otherwise agreed, the local team will be the Estia scientific team, who will work in close collaboration with the external proposal team who join remotely.
- No beamtime promises. If an experiment doesn't work, we pull out the sample and put something else in.
- Team expectations: We need at least one experienced Postdoc/PhD student who will engage on the data analysis side. We are also commissioning the data analysis pipeline and the scientific case of the instrument, not just the ability to take data.

Early Science Program

Google Form



- Emailed to participants after workshop
- Benchmarking & ES experiments
- Data analysis and SE requirements
- Submitted information will be kept confidential
- Help to assign experiment priorities (feasibility & scientific merit)

Owner	Other team members	Test Case	Sample Status	Sample Environment Required	Pre-characterisation	Measurement Description & Justification	Abstract / Further Information	Reference
		Benchmarking	Ready	Cryostat (2-420K)				
		SmallSamples	Not_Ready	Magnet (2T)				
		Focusing		RT Sample Changer				
		HighQ		Solid-Liquid Sample Changer				
		HighThroughput		Transport Stage				
		HighFlux						
		Time-resolved						

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