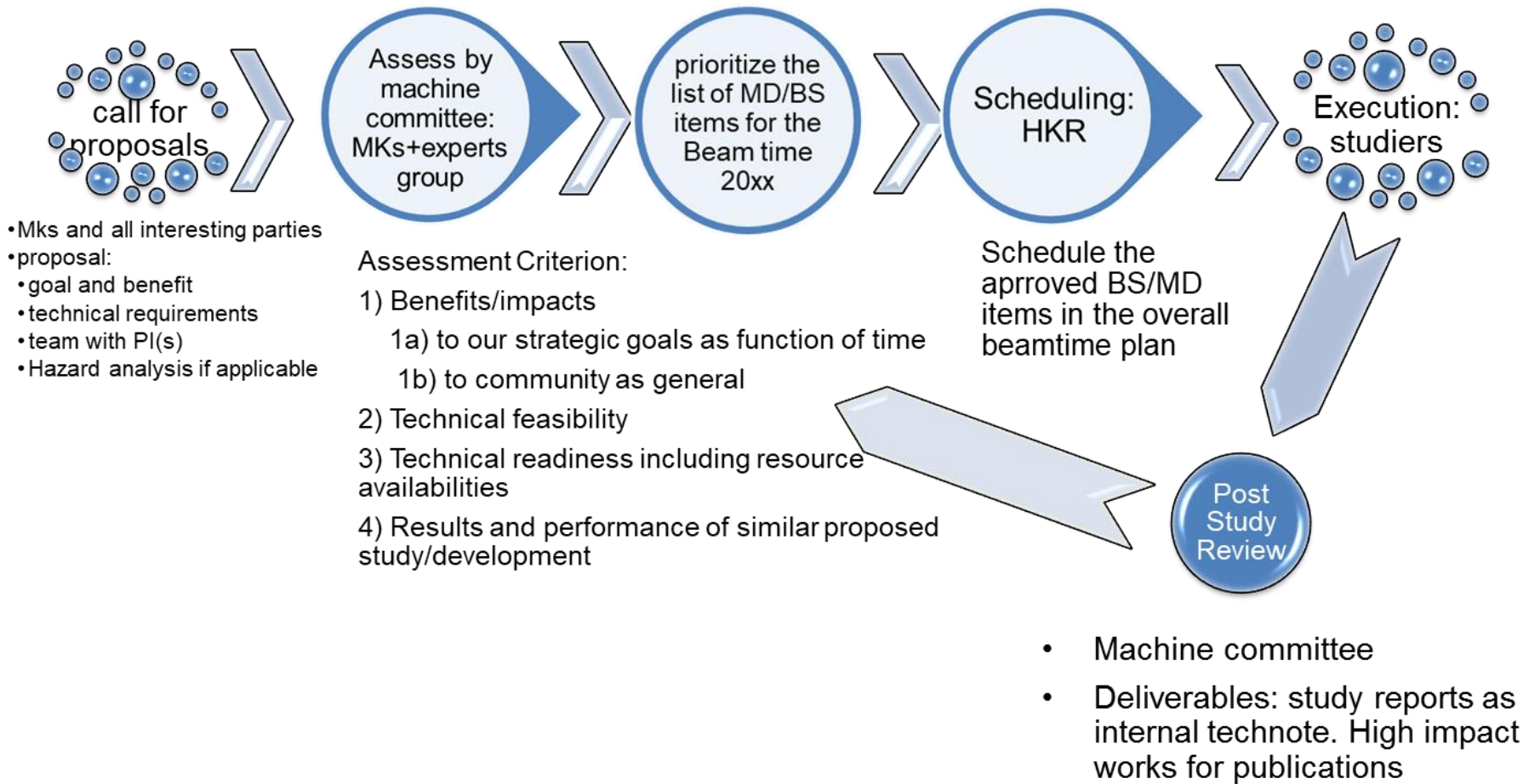


A detailed wireframe model of a particle accelerator, showing a large circular ring and several smaller, more complex structures. The model is rendered in a light gray color, highlighting the intricate geometry of the machine's components.

Beam Study/ Machine Development Planning Process

GSI ACC Operations

Beam Study/ Machine Development Planning Process



GSI Beam Experiment Proposal

BE Number:

Beam Experiment Title:

Spokesperson(s) a.k.a. PI:

With which accelerator/beamline will this EXPERIMENT be carried out?

1- Team:

2- Experiment Goal:

3- Benefits:

- a) immediate performance improvement
- b) operations performance and reliability
- c) critical for future upgrade measures, if yes, when?
- d) general accelerator physics
- e) experiment detector development

4- Brief Experiment Description:

5- Beam- and Machine Parameters

Ion Species
 Charge State
 Intensity
 Beam Parameters
 Machine Parameters

6- Hazard Analysis - List Potentially Hazardous Equipment or Potentially Hazardous Operations Introduced by the Study. If none, then state none here.

7- Resources:

Instrumentation
 Applications
 Time
 Personnel

8- Does this study involve INTENTIONAL Beam loss? Yes No

9- Plan for Data Analysis:

- 10- Results:**
- Template can be found at:
https://www.gsi.de/work/beschleunigerbetrieb/dokumente/gsi_beam_experiment_machine_development.htm

Planning of machine beam time

Principles in regards to the planning and execution of machine beam time have been aligned such that

- dedicated beam time for machine development and beam study need to be planned for each beam time as usual and common practice
- the duration of the machine beam time is driven by the needs for further machine development towards FAIR and need also to fit into the overall schedule for the beam time. It is to be preplanned with a reasonable duration and need not to be compromised as it is an essential part of the effort to develop the machines further
- the machine coordinator is the responsible person for the content of the machine beam time as the machine coordinator bears the responsibility for the further development of the respective machine
- the content of the machine beam time will be presented by the machine coordinator in a dedicated session during one of the machine meeting series as part of beam time preparation for information and any feedback will be collected in this meeting
- for each machine experiment during the machine beam time a dedicated brief one page form describing the content and the purpose of the machine experiment will be prepared
- after the machine beam time the results of the machine experiments will be documented and presented in a dedicated machine meeting