

## SECAR Collaboration Agreement

The SECAR Collaboration works together to advance science using SECAR. Activities include planning and executing experiments, data analysis, publication, exploring impact on theory and astrophysics, and technical developments that advance SECAR's capabilities. The SECAR Collaboration therefore enables FRIB, and the FRIB user community, through open scientific collaboration to take full advantage of the SECAR instrument.

1. The SECAR Collaboration is an open collaboration.
  - a. Scientists with interest in carrying out experiments with the SECAR system can join by contacting the chair of the Executive Council, who will add them to the collaboration list.
  - b. The collaboration welcomes all participants with potential interest in using SECAR to join the collaboration, including students and young scientists. Members of the collaboration may actively participate in SECAR experiments and developments, may just join to learn about SECAR, or may remain inactive until opportunities arise.
2. The SECAR Collaboration has an Executive Council
  - a. The Executive Council has four members:
    - i. Two members are elected from members of the collaboration and serve a four year successive term, two years as vice-chair and two years as chair.
    - ii. One member is the MSU member of the collaboration, who leads the local SECAR activities at MSU, and is determined by the MSU senior members of the SECAR Core Group.
    - iii. One member serves as communication officer and is elected for a four year term. The communication officer leads the newsletter, the website, and other efforts that enhance communication within the collaboration.
    - iv. Executive Council members in i) and iii) are elected by the collaboration following a nomination process.
  - b. Together the Executive Council convenes collaboration meetings, serves as a contact point for the collaboration, communicates with FRIB on behalf of the collaboration, and coordinates proposals, experiments, and data sharing as needed (see below).
3. SECAR Core Group
  - a. The SECAR Core Group consists of scientists that have made significant contributions to the SECAR system with impact beyond the individual experiments they lead.
  - b. Core group members are expected to actively participate in SECAR activities in a given year.
  - c. If a Core Group member becomes inactive (for example a student or postdoc may leave the field), membership is retained for 5 years.
  - d. New members are nominated by members of the collaboration based on their contributions. New members are accepted by majority vote of the Core Group.
4. Experiment Proposals
  - a. The collaboration encourages experiment proposals from the collaboration and the community at large.

- b. Experimenters from outside of the collaboration who wish to collaborate with members of the SECAR Collaboration on experiments with the SECAR system, and who intend to propose or play a lead role in such an experiment, **must join** the SECAR collaboration **prior** to proposal submission.
  - c. The intent to submit a proposal within the SECAR Collaboration should be indicated at **least a month prior to the facility proposal deadline** by sending a short abstract to the executive council.
  - d. Drafts of proposals within the SECAR Collaboration must be submitted to the Executive Council **at least two weeks prior to the facility proposal deadline** (unless otherwise specified by the collaboration for a specific solicitation).
  - e. The Executive Council distributes all SECAR proposals to the Core Group. The Core Group is automatically invited to join and to add members of their research groups to *all* proposals. The final list of participants is communicated to the proposal spokespersons.
  - f. If overlapping proposals are submitted to the Executive Council, or if there are disputes on spokespersonship, the Executive Council will work with the proponents to resolve the conflicts and merge the interests of different groups into a collaborative proposal.
  - g. Spokespersons of proposals are free to circulate proposals more broadly within or outside the collaboration and add other participants from within or from outside of the collaboration. The collaboration does not require all participants of SECAR Collaboration proposals to be part of the SECAR Collaboration as long as the spokesperson(s) of SECAR Collaboration proposals are members of the SECAR Collaboration.
5. Data Sharing
- a. Sharing of data is expected and will be important to provide scientific opportunities for both the Core Group and the broader collaboration. The experiment spokespersons and the members of the Core Group that actively participate in the experiment discuss together how data will be shared and develop a data sharing plan. This preferably occurs before the experiment begins, but must take place at the latest within a week after the experiment was run.
  - b. Members of the Core Group will have access to, and will archive, all SECAR Collaboration data for development purposes.
6. Authorship on SECAR publications
- a. Core Group members must be invited to be co-authors on any publication resulting from experiments with the SECAR system carried out within the SECAR Collaboration. (This does not apply, for example, to publications of theoretical work, of simulations, or of development of specific pieces of equipment for SECAR).
  - b. Other co-authorship is decided by the active participants in the project based on contributions.
  - c. APS ethics guidelines concerning publications apply.
  - d. The experiment spokespersons and the members of the Core Group that actively participated in the experiment discuss together first authorship of the papers resulting from an experiment as part of the data sharing plan.
7. Changes

- a. Changes to this document are proposed by members of the collaboration and require a vote of the active Core Group with more than  $2/3$  in favor.