Mechanical Polishing of Niobium Samples for SRF Studies

Flat substrates are an important for studying material growth and for many microscopy techniques. For this project, the student will develop a mechanical polishing technique for creating flat niobium without any embedded material. This will involve reviewing existing techniques employed at other labs, setting up a polishing apparatus, testing polishing techniques, and confirming results using microscopy (optical, AFM, etc.).

Mentor: Ryan Porter