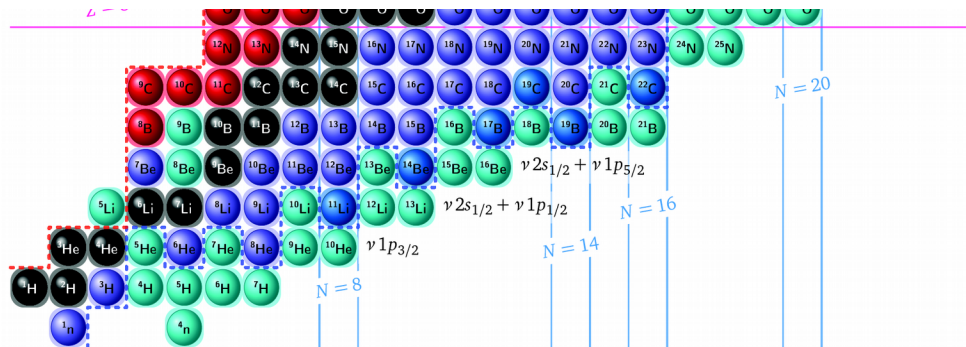


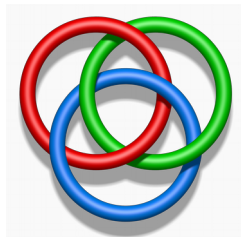
Internship in Experimental Nuclear Structure



The nuclear structure group at LPC Caen focuses its research on the study of light nuclei far from the stability, especially at the neutron dripline. In this context, several experiments were conducted at the RIKEN accelerator in Tokyo (Japan) on the heaviest nuclei up to $Z=9$.

The experimental technique is based on the measurement of all reaction products (neutrons, gammas and charged particles) produced by the breakup of different radioactive beams at the SAMURAI experimental area. SAMURAI itself is a large gap spectrometer instrumented with several drift chambers.

Several experiments have been conducted by our group and during his/her internship the student will work on new algorithms in order to track multiple charged particles, within the analysis framework used by the collaboration, and based on C++/CERN Root routines. Besides the fact that these events have been systemically discarded up to now, this algorithms will open new possibilities in future experiments.



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