CAPTAIN Report – FY16 Q4

1. **Preparation for Second Neutron Run**
   The collaboration continues to work on preparations for the neutron run in July 2017 with the Mini-CAPTAIN detector. The final design of the internal purification system has been completed with the Italian firm, Criotec. Figure 1 shows an engineering drawing of the final design and its location in Mini-CAPTAIN. Delivery of the system is expected in November 2016.

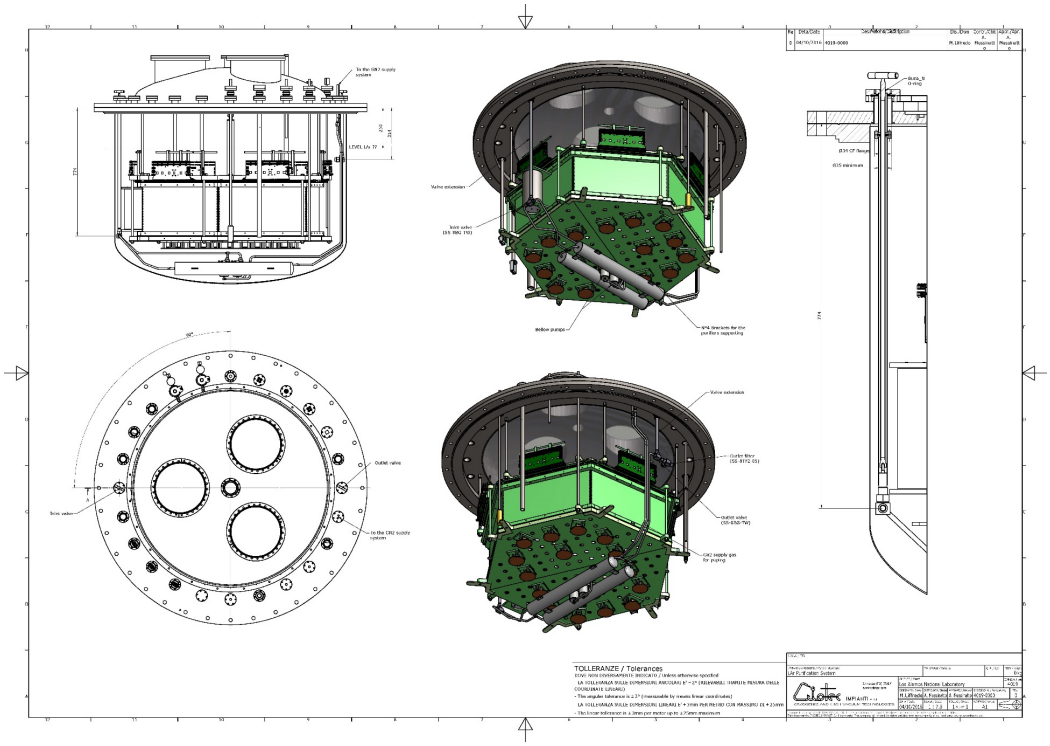

Figure 1: Criotec internal filtration system final design.

2. **July 2016 Collaboration Meeting**
   In July 2016, the CAPTAIN collaboration held a meeting in Santa Fe, NM. Presentations including work on the data analysis of the February 2016 neutron run and current plans for preparing for the July 2017 neutron run. In addition, the collaboration decided to focus on three scientific goals: 1) completion of the neutron measurements at LANSCE with the Mini-CAPTAIN detector, 2) pursue a low-energy neutrino program (potentially at SNS) with CAPTAIN, and 3) pursue R&D activities relevant to the liquid argon TPC long-baseline program. The collaboration also set its next two meetings for November 2016 and February 2017.