**210Pb AMS and its potential in Astroparticle Physics Experiments**

Even when the capabilities of AMS for the assay of 210Pb (*T*1/2 = 22.2 y) were studied already at the beginning in the early 2000s, not much effort was done since then to make 210Pb a real “AMS radionuclide”. In recent years, the interest for ultra-sensitive and fast assay of 210Pb has increased, mainly because of the requirements of the radioassay of materials used in ultra-low background experiments for Astroparticle Physics. With a tested 210Pb/Pb background of 10-14, the AEL-AMS facility at the University of Ottawa has the potential of performing groundbreaking 210Pb measurements in the material of major components of experiments searching for direct detection of dark matter, like DEAP/DarkSide and NEWS-G. Therefore, developing 210Pb AMS is a main task of the ASTREA project (Accelerator mass spectrometry Survey of Trace Radionuclides for Experiments on Astroparticle physics). This project is led by the AEL-AMS Laboratory at the University of Ottawa, in collaboration with Carleton University, Queens University and University of Alberta.