Krypton Removal in support of LUX

TOM COFFEY, Case Western Reserve University, LUX COLLABORATION — There are a number of experiments looking for experimental evidence for dark matter in the form of Weakly Interacting Massive Particles (WIMPs). The large underground xenon (LUX) experiment is a leading dark matter experiment in N. America. LUX is comprised of a time projection chamber filled with liquid xenon and faces a number interesting technical challenges. One of these is reducing the primary internal background risk posed by trace krypton, and its radioactive isotope, $^{85}$Kr, which is a beta emitter. An update of the Case krypton-xenon separation program will be presented.

$^1$Speaking for CWRU group in LUX collaboration