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Krypton removal via chromatography for the LZ dark matter experiment[1] ANDREW AMES, Stanford University, LUX-ZEPLIN (LZ) COLLABORATION — The beta emitter Krypton-85 is a significant potential source of electron recoil backgrounds in liquid xenon dark matter experiments. The LUX-ZEPLIN (LZ) experiment uses a gas charcoal chromatography system to remove trace krypton from the xenon before it is deployed in the detector. This system, located at SLAC National Accelerator Laboratory, has successfully purified xenon to a total krypton concentration of less than 100 parts-per-quadrillion krypton, and will be used to process the full 10 tonnes of xenon for LZ. In this talk, I will present an overview of the system and report on the status of the krypton removal campaign.

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