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Expected performance results from upgraded LHCb and SMOG II

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The LHCb experiment has recently undergone a series of major upgrades: the entire tracking system has been replaced with higher-granularity sensors, the readout electronics have been upgraded, and all hardware triggers have been removed in favor of a new state-of-the-art streaming readout system. In addition, the gaseous target SMOG system has been upgraded with a dedicated storage cell to greatly increase the rate of fixed target collisions at LHCb. This talk will include the first performance results from the new LHCb tracking system, the streaming readout system, and SMOG II, with a focus on how these upgrades directly impact the LHCb heavy ion physics program. Further upgrades planned for LHC Run 4 and 5 will also be discussed.

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