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CEBAF 5-pass

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The 5-pass energy recovery project at CEBAF (ER@CEBAF) would become the first facility to have the energy reach to demonstrate ERL performance in the multi-GeV range. This increment in peak energy from the 1 GeV CEBAF-ER demonstration to the target ~ 7 GeV brings incoherent synchrotron radiation-induced energy loss, presents an invaluable opportunity for multi-pass beam break-up studies, and enables the experimental exploration of multi-pass, multi-GeV energy recovery. We update the current project status, studies on RF optics optimization, longitudinal match, and modifications to CEBAF.

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