Abstract Submitted
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Revamping Undergraduate Laboratory to Stimulate Empirically-Based Learning and Foster Modern Research Skills[1] SEAN M. O'MALLEY, CORY TROUT, RICHARD JIMENEZ, ANNA MOORHOUSE, GRACE BRANNIGAN, DANIEL M. BUBB, Rutgers University-Camden — NSF recognizes a national need for a well-prepared STEM workforce. We have implemented an approach to partially address this issue by revamping the way our introductory physics labs are conducted. The approach seeks to provide students with an experience that will engage them in cognitive processes while also providing relevant technical training and exposure to revolutionary technologies. An additional objective of this proposal is to create a learning environment in which the top students can be engaged while simultaneously employing the methods that are effective for the greatest number of students. Details, challenges and results of implementing our approach will be discussed

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