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## **WITHDRAWN - In-class worksheets for 3rd year E&M**

*Thursday 1 June 2017 14:30 (15 minutes)*

Physics education research shows that improving student engagement increases the retention of material presented in class, but this work has focused on material at the first year level. Far less work has explored increasing engagement at the upper division level. This talk will discuss an innovative method of presenting example derivations and calculations in a third year physics classes on electricity and magnetism for physics and astrophysics majors. The talk will discuss our preliminary observations of student engagement and formative assessment in the classroom and applications to other upper division physics classes.

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