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First order error corrections in common introductory physics experiments[1] JACOB BECKEY, ANDREW BAKER, VASUDEVA ARAVIND, Clarion University, CLARION TEAM — As a part of introductory physics courses, students perform different standard lab experiments. Almost all of these experiments are prone to errors owing to factors like friction, misalignment of equipment, air drag, etc. Usually these types of errors are ignored by students and not much thought is paid to the source of these errors. However, paying attention to these factors that give rise to errors help students make better physics models and understand physical phenomena behind experiments in more detail. In this work, we explore common causes of errors in introductory physics experiment and suggest changes that will mitigate the errors, or suggest models that take the sources of these errors into consideration. This work helps students build better and refined physical models and understand physics concepts in greater detail.

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