Abstract Submitted
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Novel Magnetic Measurement Apparatus JAN MAKKINJE, GEORGE ZIMMERMAN, Boston University — We have developed a version of a Guoy Balance for the measurement of magnetization and magnetic susceptibility by the use of commercial neodymium magnets and a scale capable of milligram accuracy. The scale, modified for digital data acquisition is capable of measuring the magnetic properties of both diamagnetic and paramagnetic substances. Examples of the materials we have measured are the magnetic properties of liquid nitrogen, liquid oxygen, various magnetic chemical compounds and high transition temperature superconductors. The construction and use of the device as well as sample measurements will be presented.

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