Abstract Submitted
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Magentic Levitation ZACHARY BROWN, SUNY Fredonia — The idea of magnetic levitation is an attractive concept for the trains of tomorrow. The efficiency of this idea was explored using a rotating array of magnets, and a copper sheet. The array was placed on a rotating disc, with a copper plate placed at varying separation distances from the array. As the magnetic field was rotated, a magnetic force was induced in the copper plate, causing it to repel the array. The force exerted on the plate was then measured as a function of separation distance and power input to determine the maximum ratio of output force to input power. Future plans include varying the material and construction of the plate, as well as possibly trying to determine the effect of eddy currents on the project.

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