

Construction of a Centripetal Force Experiment on LEGO Education

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Abstract

This paper described the measurement of centrifugal force by using a construction of LEGO Education apparatus. The main component consists of a spindle equipped with motor and connected with a long beam in horizontal. An object connected to a massless spring was put on the beam at the end of the beam. When the beam rotated around spindle axis and the object-spring extended due to the rotation. The extended spring was measured to calculate the centrifugal force from the restore force of spring. The results suggest that the centrifugal force was equal and correspond to the restore force of spring. This apparatus can be used to apply in physics laboratory or in physics classroom for measurement of centrifugal force.

Keywords: centrifugal force , LEGO Education and force of sprin

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