MagLev Mini-Project Brief

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Here's what you get when you open map **MAS22_SciencePark.uproject** and hunt for the Maglev.

and here's some ideas for investigations.

Reproducing the Response Curve

Here you could reproduce the response curve from Kacik Figure 5.

The Jump Phenomenon

Try to reproduce this.

Period Doubling

This happens on Kacik Figure 5 on the curve segments bounded by 'PD'. Here the response happens at twice the driven frequency.

Changing the Load Resistance

This is the parameter **RL.** The VEH produces a *voltage*. To extract electrical *power* then this voltage is applied across an electrical load resistance which causes a current to flow through this resistor. The electrical power produced is the product of the voltage and the current. Here's a diagram to help to understand this. The red arrow is the voltage produced, the green arrow is the resulting current flow, and the blue arrows show the power produced. Of course in a real system, the load resistor will be a battery or other energy storage device.