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# Simulating the Movement of a Double Pendulum with Euler's Method

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## 1 WHAT ARE WE TRYING TO DO HERE?

We want to spend some time thinking about double pendulums and numerical simulations. Our goal is, of course, to create a working simulation of a double pendulum. What has to be done to get there? What kind of math is necessary? Let's start our journey by breaking down the problem into smaller pieces.

- Defining and labeling of the mathematical double pendulum model
- Deriving the Differential Equation
- Setting up the simulation using the Differential Equation

That's better. The problem doesn't look all that daunting anymore.

## 2 DEFINING THE DOUBLE PENDULUM

## 3 CONSTRUCTING THE DIFFERENTIAL EQUATION