

Euler Wobble

PHY 230

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1 Difficulties with the Program

The same peculiar issue with the animation appeared again this week, where the values were being updated, but the drawing was not appearing. I thought that I had avoided this as I started by coping the spring app and working on that project by changing the code. However, some point while writing the code, I must have changed something to spoil the animation. I fixed this by quitting Xcode, re copying the spring app and copying my code into that. This fixed the problem.

I also had small typos, which were hard to debug. One was where I used a vector instead of a unit vector, which resulted in large values that give erroneous results.

2 Euler Wobble

Working on the theory of this app was very interesting. It helped me understand how we can describe the formation of shadows due to light, and how changing perspective changes the size of an object. It was really interesting to study this, and code this. It makes me wonder if the first initial 3D video games incorporated this, and if they are still using this.

The app has sliders to change the perspective, the speed of rotation, and the lengths of the sides of the cuboids. We also have an option of drawing the cuboid with only its frames, and with faces.