ADVANCED PHYSICS CLUB

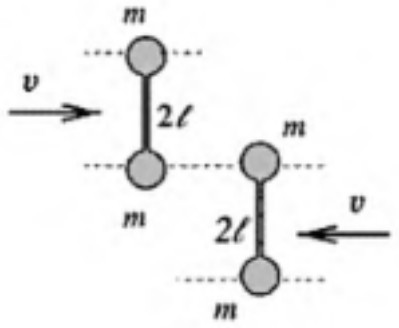
DECEMBER 9, 2018

Today's meeting

Today we continued the discussion of rotational motion and we discussed angular momentum and torque. We spent most of our time solving the homework problems

Discussed problem

1. Two identical dumbbells move towards each other on a horizontal air-cushioned table, as shown in the figure. Each can be considered as two point masses m joined by a weightless rod of length $2t$. Initially, they are not rotating. Describe the motion of the dumbbells after elastic collision. Plot the trajectory of the centers of mass of the dumbbells as a function of time.



Homework

Try to solve (and time yourself) problems from the last year's $F = ma$ exam (2018, exam A). The problems can be found here: https://www.aapt.org/physicsteam/2019/upload/Fma-2018-A.pdf

After you are done you can check your answers here: https://www.aapt.org/physicsteam/2019/exams.cfm Mark the problems and topics you had difficulty with. We will discuss them during the next meeting.

For the next meeting

The next club meeting is on **Sunday, January 6, 2019, at 2:40pm, room P-131**. We will talk about $F = ma$ problems and content of the exam.