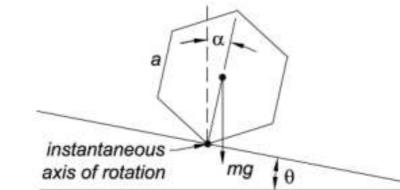
Michigan Math Club



Thursday at 4pm in EH1360 Pizza + pop outside afterwards!!



How a pencil rolls down a slope

Guanhua Sun 01 February 2024



Have you ever put a pencil on a slope and let it roll? Will it keep rolling faster, or achieve a steady terminal velocity? In this talk, I will analyze the case when a pencil, or any polygonal shape, rolls down the slope of different inclines, frictions and restitutions. Both physical modeling and computer simulations will be shown. This problem also appeared in the 1998 International Physics Olympiad (IPhO).