

MN-1

Angular Momentum
Conservation, by Using Man
with Weights or Bicycle
Wheel on Rotating Stool
M-5 S-1



Using hand weights: Sit on stool, hold hand weights extended at arm's length, and have someone start you rotating slowly. Pull the weights in quickly; then let the weights out quickly. Making the changes quickly minimizes the effect of friction.

Using the bicycle wheel: Sit on stool, hold wheel with axle horizontal, and spin wheel. Grasp one end of the axle firmly with either hand, with the axle of the wheel perpendicular to the axis of the stool. Now quickly rotate axis of spinning wheel into vertical position. Then quickly rotate axis into anti-vertical position. Then quickly rotate axis into horizontal position. Making the changes quickly minimizes the effect of friction.