

## PROBLEM 10.1

Two identical spheres, each of mass  $m$ , are suspended from a horizontal ceiling by two strings of length  $l$ . The strings are attached to the ceiling at a distance  $2l$  apart. The spheres are released from rest at an angle  $\theta_0$  to the vertical. Determine the velocity of each sphere at the instant the strings are horizontal.

Hint: Use the principle of conservation of energy.

Assume that the strings are inextensible and that the spheres do not collide.

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