

2. (35 points). Two strings equidistant from the center of mass of an extended object support the object in a stationary state. Find the tension in one wire at the instant the other wire is cut. Assume that the moment of inertia of the object about an axis perpendicular to the string and at the point of suspension of the object, A , is $(3/2)Ma^2$ where $2a$ is the separation between the strings. M is the mass.

