

Exercise 7 - TFY4345 Classical Mechanics

2020

1 Inertia tensor

A very thin rectangular slab has been placed in the xyz -coordinates system, such that the origin is in one of the slab corners, and the sides are along the x - and y -axes. The corresponding side lengths are a and b . Since the slab is very thin, we can assume that $z = 0$ throughout.

(NUMMERER a), b))

- Evaluate the individual elements of the inertia tensor.
- Set $a = b$, and solve for the principal moments of inertia, and the corresponding principal axes.