

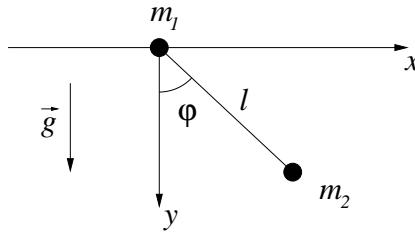
Klassische Teilchen und Felder

Präsenzübung, Blatt 05

WS 08/09 12.11.2008

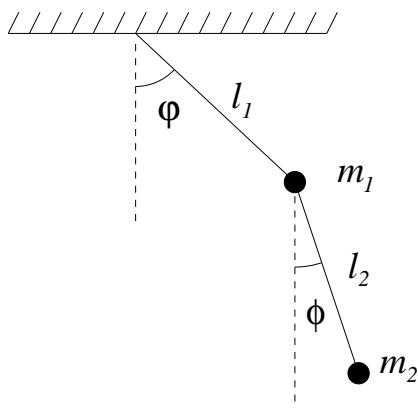
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[P10] oscillating dumbbell



A mass m_1 of a dumbbell of length ℓ is able to move frictionless on a horizontal line. On what trajectories do masses m_1 and m_2 move under the influence of gravity?

[P11] coupled pendulums



Consider two coupled pendulums under the influence of the gravitational field of the earth (see figure).

- What are the constraints?
- Find appropriate generalized coordinates.
- Identify the Lagrange function.
- Determine the equations of motion.

Meldungszeitraum für Bachelorstudiengang beachten!