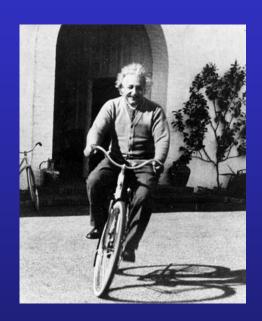


# Classical Mechanics PHYS 2006

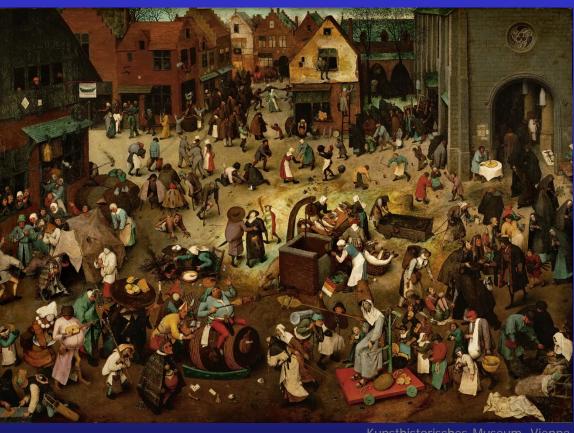
Tim Freegarde



## The Fight between Carnival and Lent

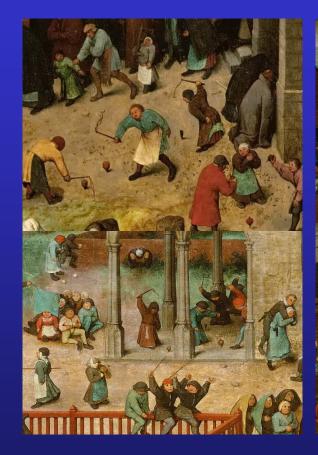
Pieter Bruegel the Elder (1559)





Kunsthistorisches Museum, Vienna

## Children's games Pieter Bruegel the Elder (1560)



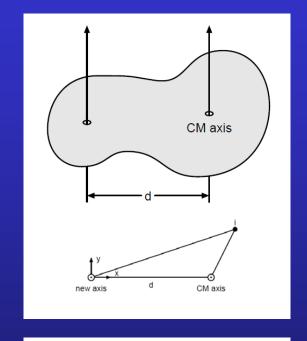


### Two theorems on moments of inertia

#### PARALLEL AXIS THEOREM

when rotation axis is displaced from centre of mass

$$I = I_{\rm CM} + Md^2$$



#### PERPENDICULAR AXIS THEOREM

for thin flat plates of arbitrary shapes

$$I_z = I_x + I_y$$

