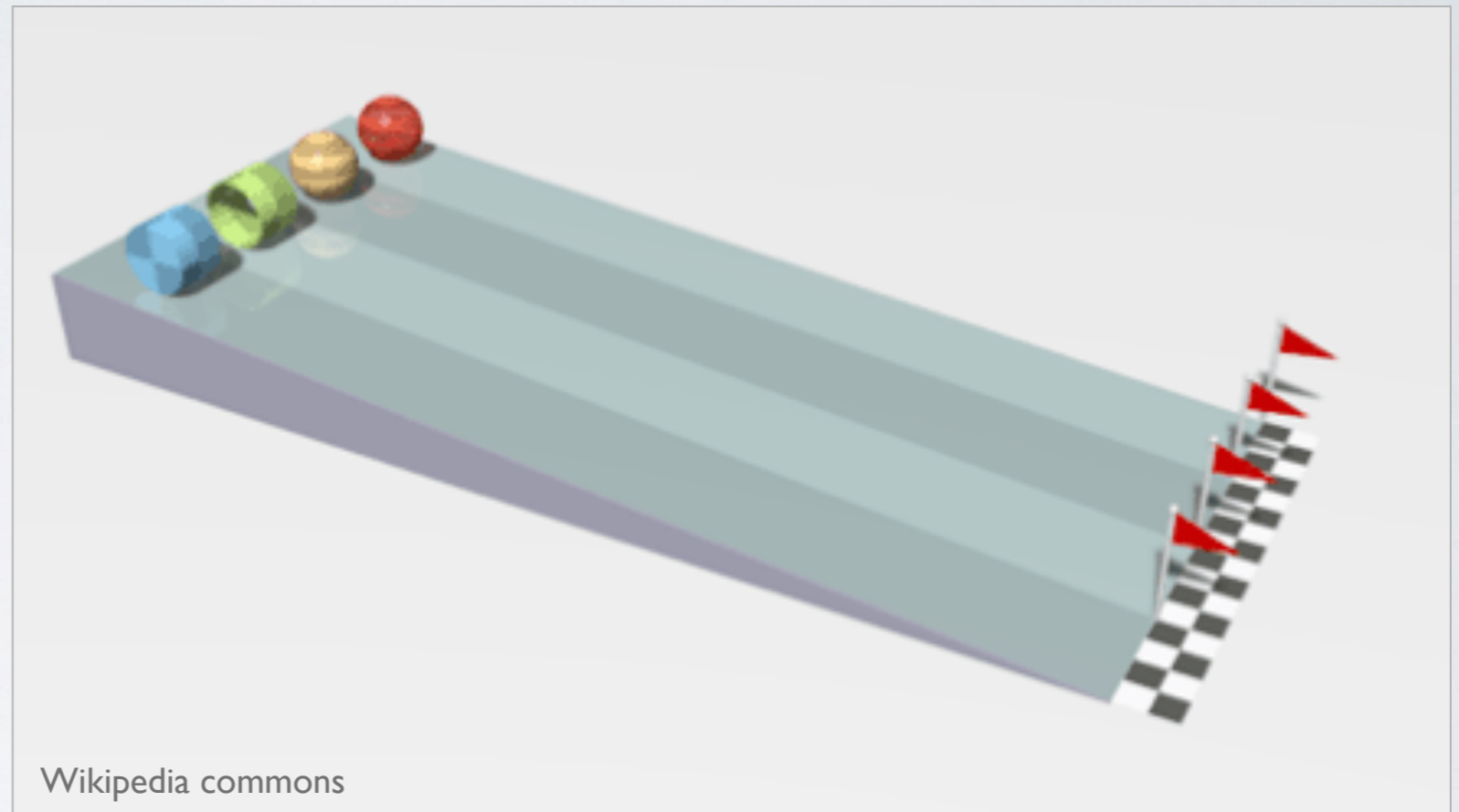


Week 6 - #2

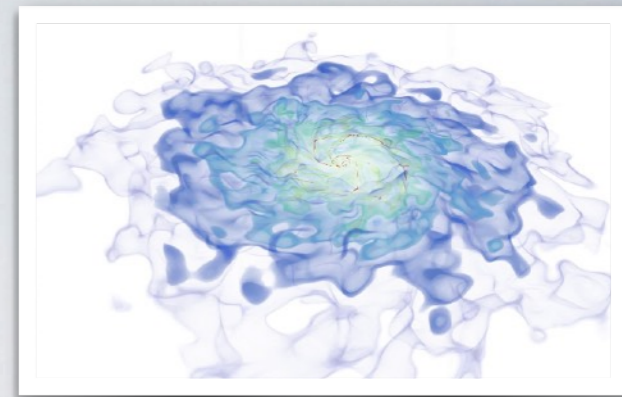
Rotation + Rolling, Torque & Angular Momentum



Today: Ch 10-11

Next Class: Ch 11

Ji-hoon Kim (Seoul National University)



Torque

Torque

- A turning or twisting action on a body about a rotation axis due to a force, the magnitude of which is defined as $rF\sin\phi$.

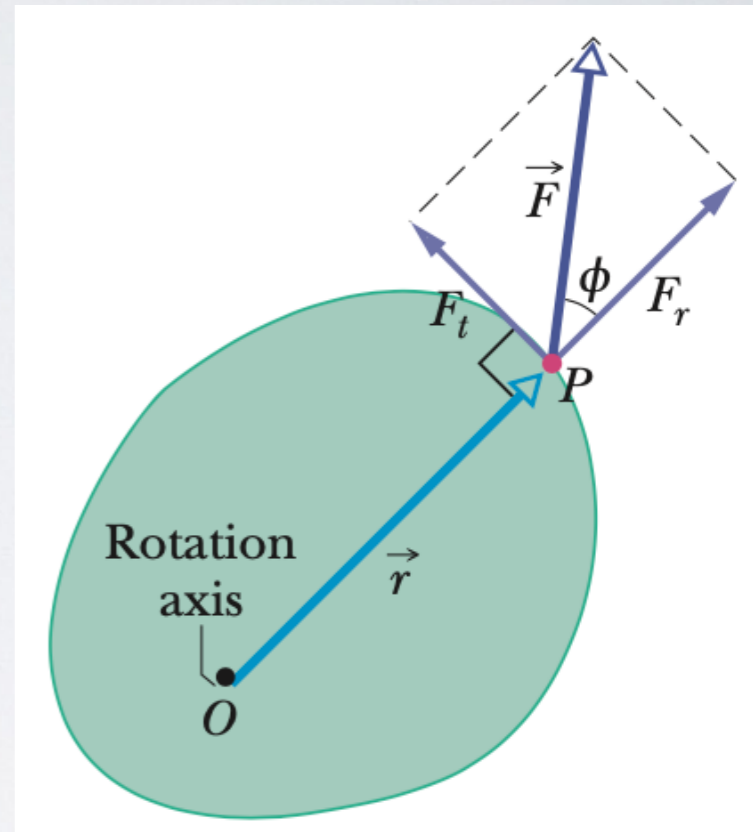
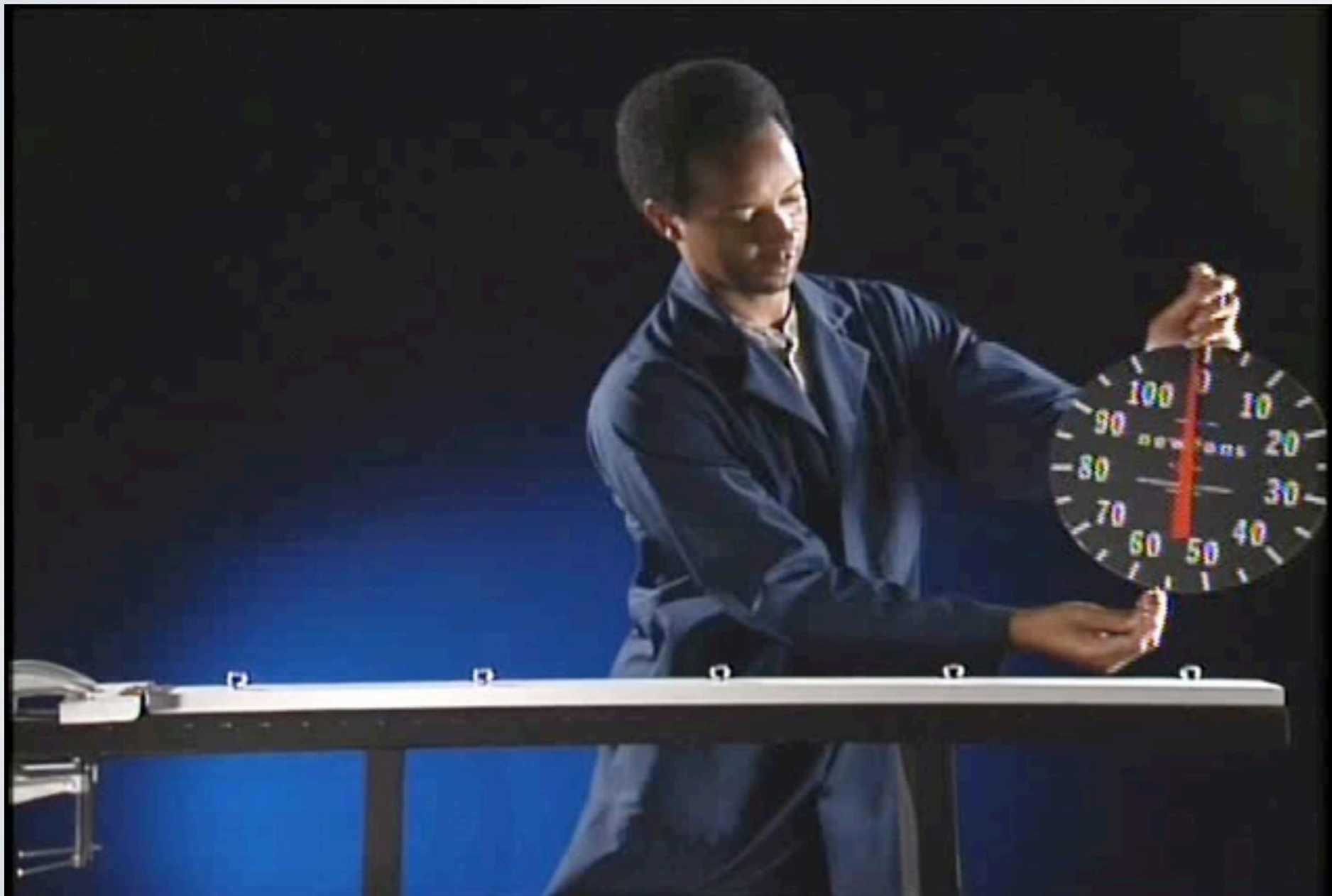


Figure 10-16, Halliday & Resnick

Torque

- A turning or twisting action on a body about a rotation axis due to a force, the magnitude of which is defined as $rF\sin\phi$.

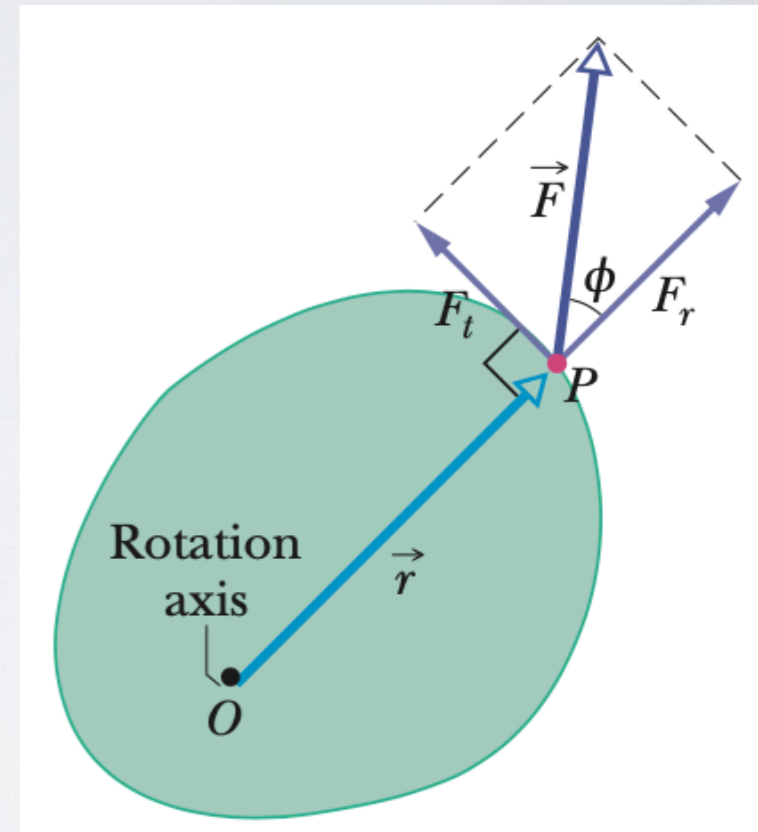
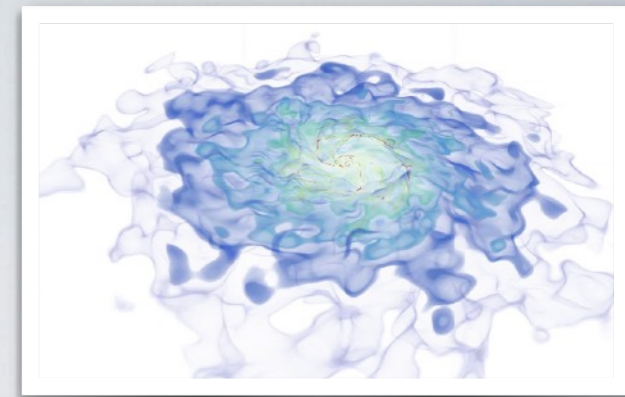


Figure 10-16, Halliday & Resnick



Rolling = Rotation + Translation

Rolling = Rotation + Translation

- Here we consider only the objects that roll without slipping or bouncing on the surface.

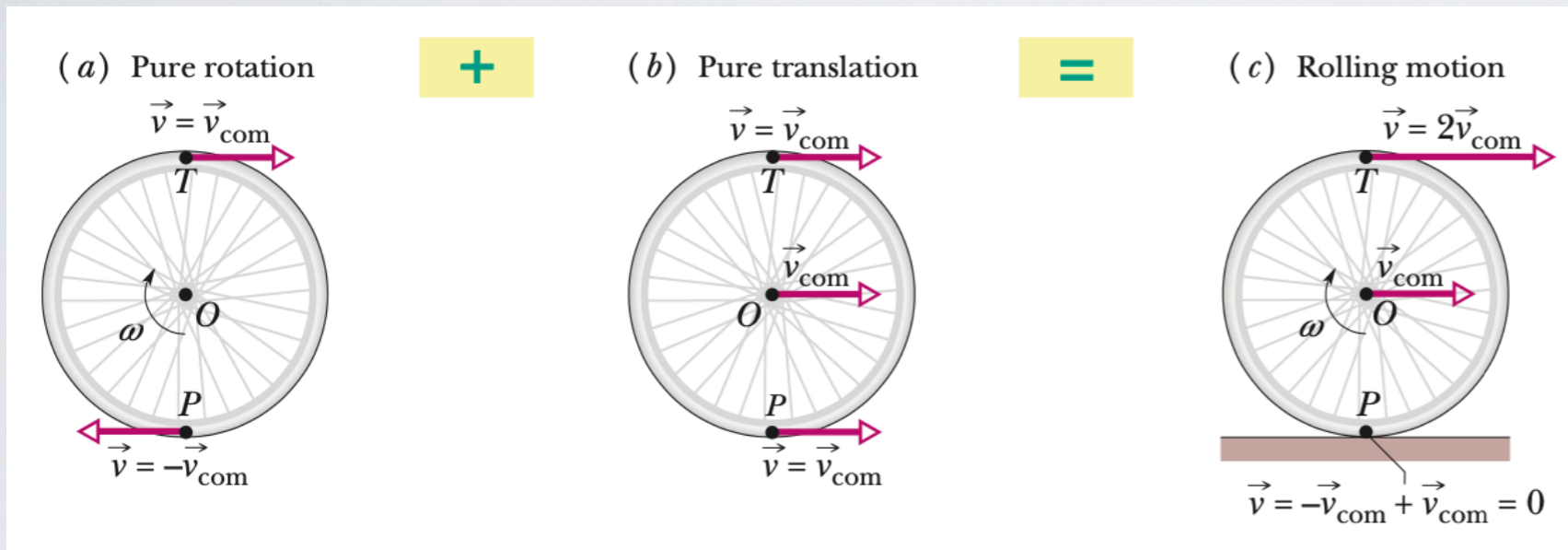


Figure 11-4, Halliday & Resnick



Wikipedia commons

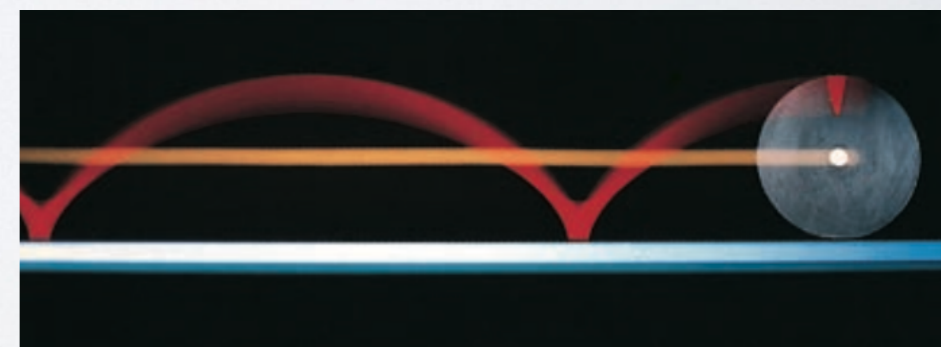


Figure 11-2, 11-5, Halliday & Resnick