GRAVITATIONAL FORCE PROBLEMS
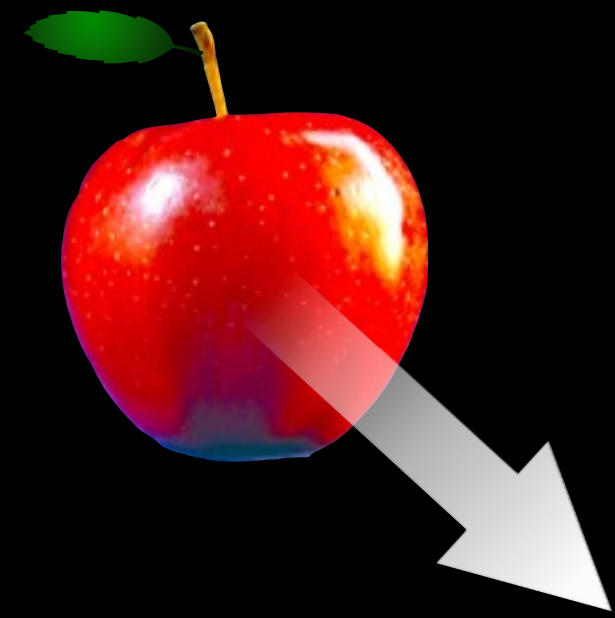
$$F_g = m\frac{GM}{r^2}$$

- Newton's gravity doesn't fit this picture

- Action at a distance not compatible with finite speed of light

- Need a way to unify gravity & spacetime

EQUIVALENCE OF GRAVITY & CURVED GEOMETRY

- Absent a force, a particles move in straight lines

- A force can curve the path

- In curved surfaces, even straight lines appear to curve

- Spatial curvature can account for gravitational "forces"

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