



Linear Momentum

Theory

- ▶ Linear momentum of an object of mass m moving with velocity \vec{v} is $\vec{p}=m\vec{v}$
- ▶ The total linear momentum for a system of objects is conserved in a collision (Since momentum is a vector the vector sum of the momentum of each object before a collision should equal the vector sum of the momentum of each object after the collision)
- ▶ Mechanical energy is not conserved in a collision

Tips

- ▶ Avoid touching the metal parts of the spheres due to danger from the high voltage spark timers
- ▶ Keep track of which spark trails came from which spheres and in which direction they were traveling



Linear Momentum Data

