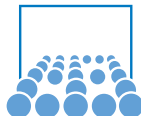


PSE Game Physics

Session (3a) Collisions extended

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Outline

Collisions

Collision detection

Collision resolution

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5. Check if any other collisions occurred (always necessary?), if yes return to step 1

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 - Sphere-Edge: Shortest line segment connecting sphere center and edge
 - Sphere-Rectangle: Two known cases: Sphere-Plane and Sphere-Edge

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 - Move Object 1 by $\frac{m_1^{-1}}{m_1^{-1} + m_2^{-2}}$ of the interpenetration depth.
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- (Later) Update velocities by applying forces to the objects (along what direction?)
- Why the weird inverse masses? Design decision: Allow infinite mass, neglect zero mass!