

Physics Fields

Three types of Physics Fields:

- **Transient Fields** - created and destroyed at runtime
- **Construction Fields** - created in the Construction Script during design time after the Blueprint is compiled
- **Persistent Fields** - remain active until removed; evaluated at every tick of gameplay

Physics Fields

- **Chaos Engine** - physics engine used by Unreal
- **Chaos Particle** - a point in space with properties such as position, orientation, velocity, and mass
- **Physics Type** - effect that will be applied to every Chaos Particle within the field

Physics Fields

Physics Types

- **Linear Force** - adds a linear force to the Particles
- **Linear Velocity** - adds a linear velocity to the Particles
- **Angular Velocity** - adds an angular velocity to the Particles
- **Angular Torque** - adds an angular torque to the Particles
- **External Strain** - can break the Particles of a Geometry Collection
- **Internal Strain** - lowers the Damage Threshold of a Geometry Collection
- **Sleeping Threshold** - sets Particle to sleep if its linear or angular velocity falls below specified value

Physics Fields

Physics Types

- **Disabled Threshold** - disables Particle if its linear or angular velocity falls below specified value
- **Activate Disabled** - reactivates disabled Particles
- **Kill Particles** - disables all Particles immediately
- **Dynamic State** - sets the states of the Particles to static, kinematic, dynamic, or sleeping
- **Collision Group** - sets the value of the Collision Group property for the Particles