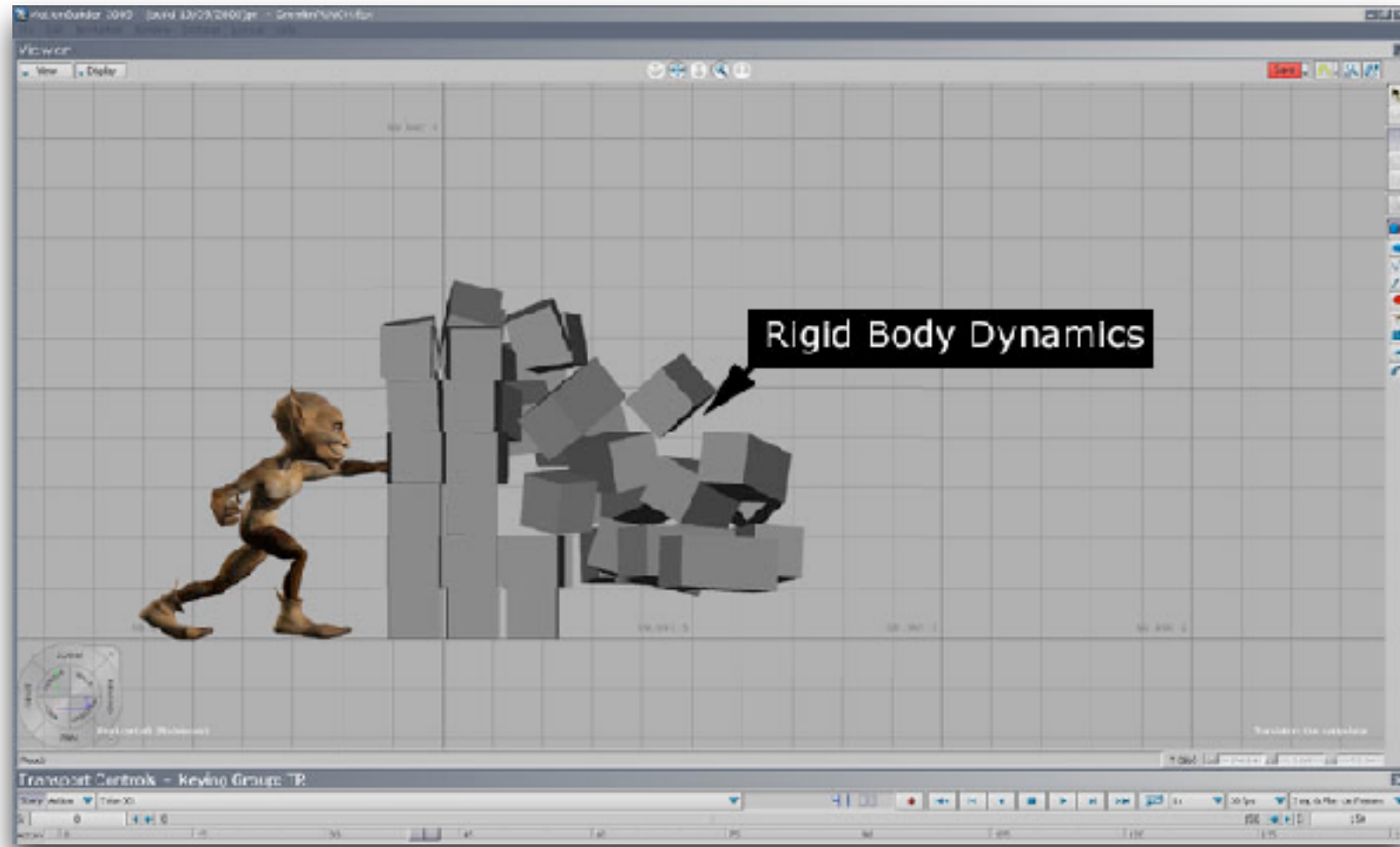


Physik



Festkörperphysik

Festkörperphysik



Massen

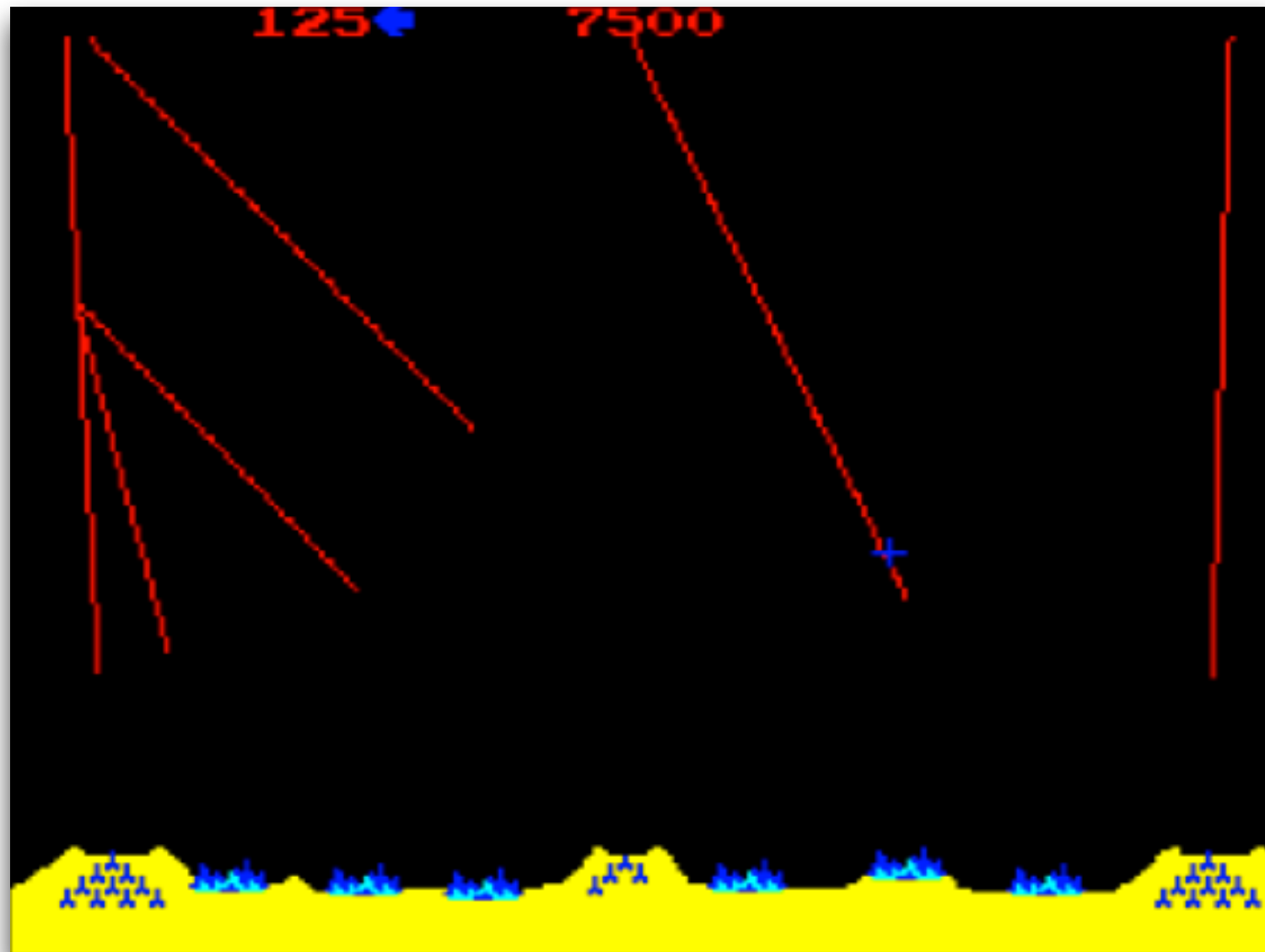
Kräfte

Position



Civilization

Geschwindigkeit



Missile Command

Rotation

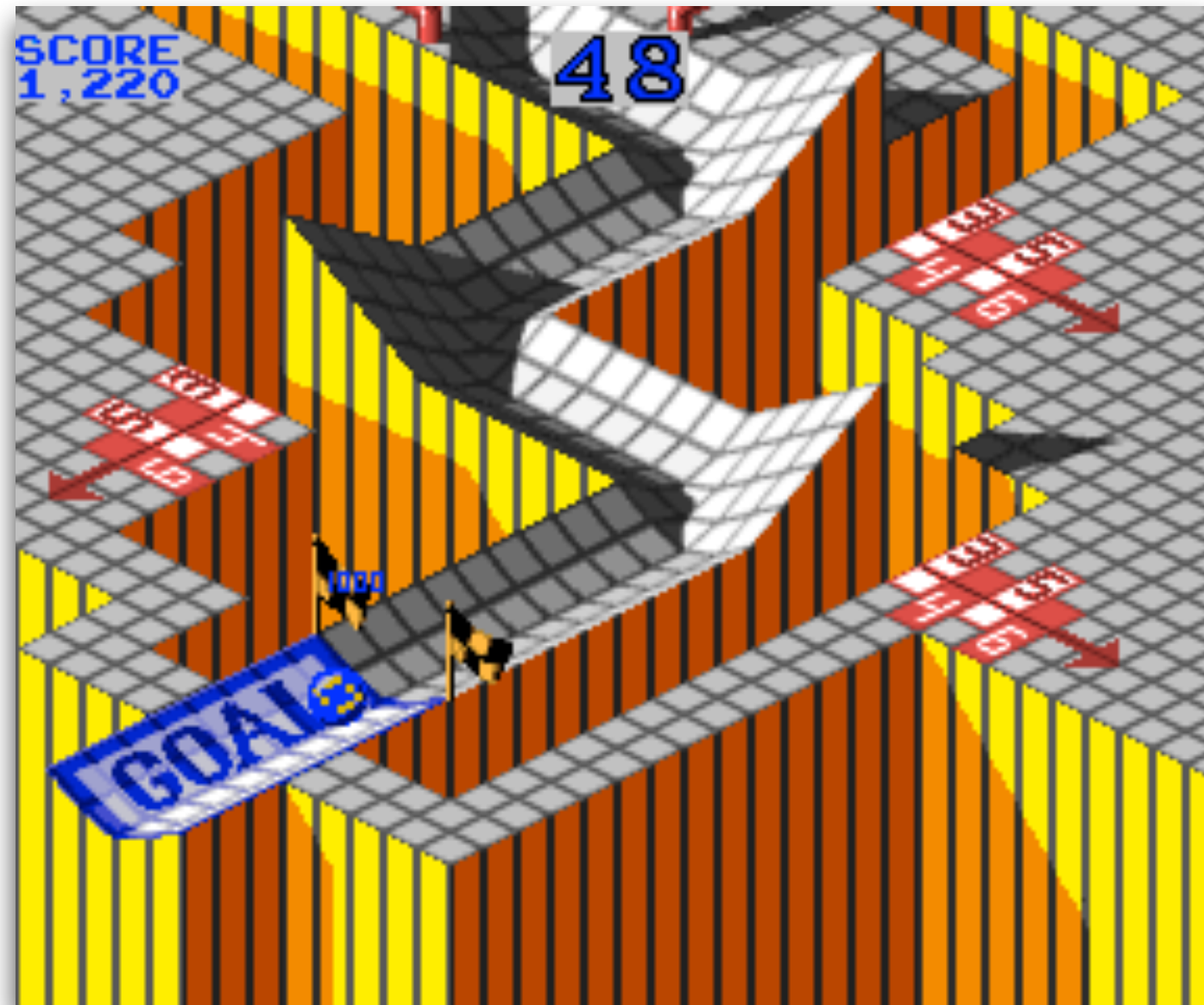


Time Pilot



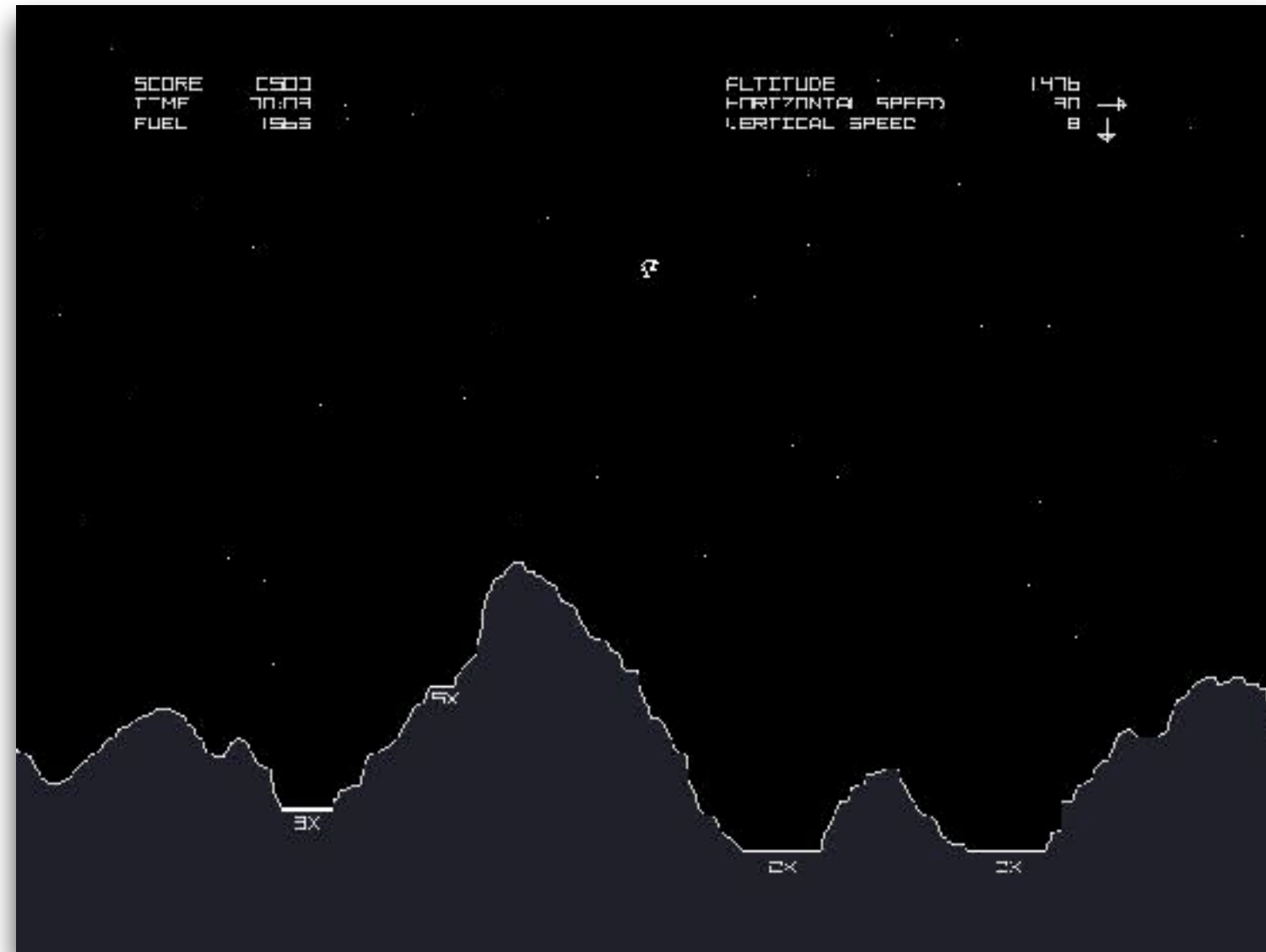
Katamari Damacy

Kraft



Marble Madness

Beschleunigung und Schwerkraft



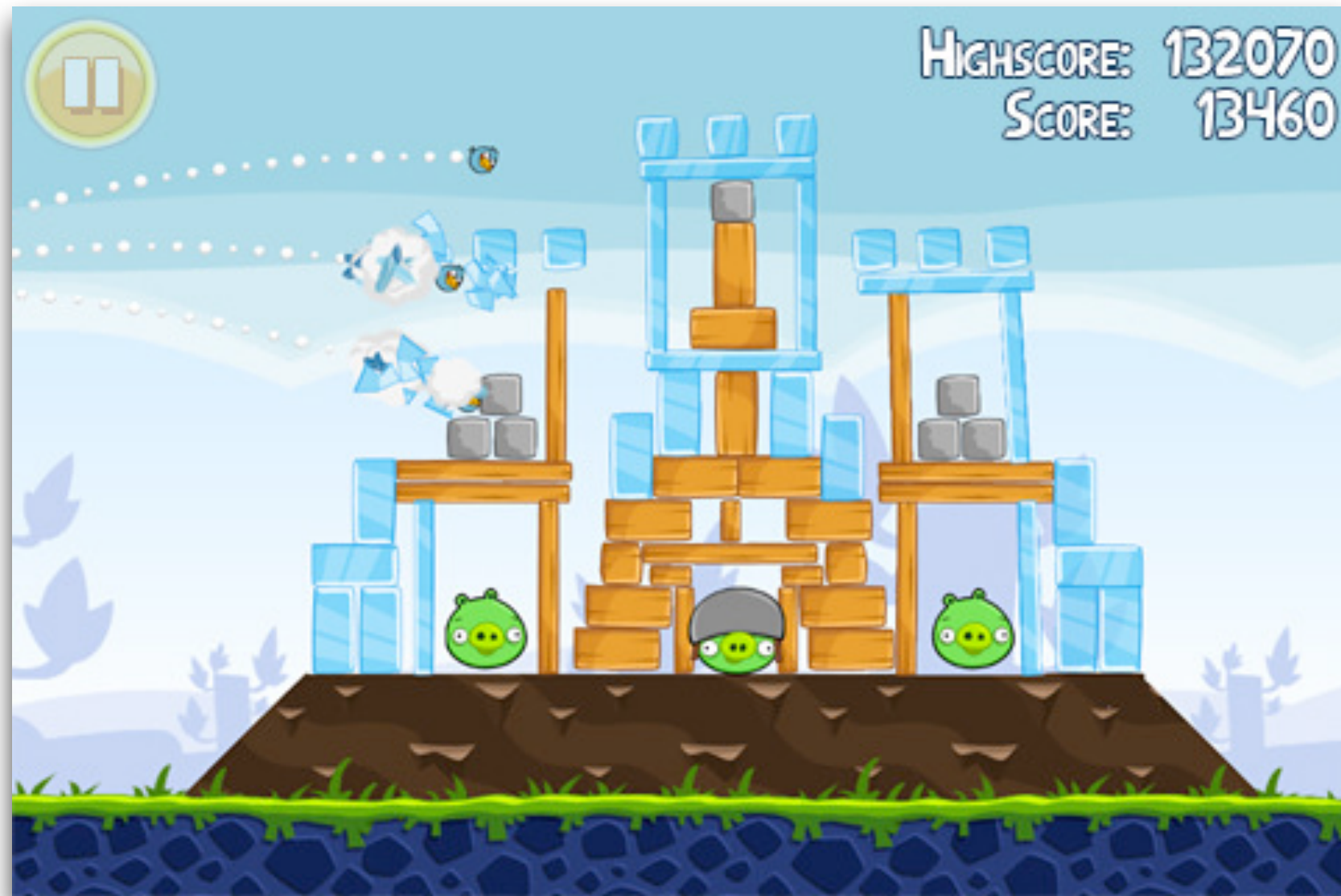
Lunar Lander

Reibung



Asteroids

Impuls



Angry Birds

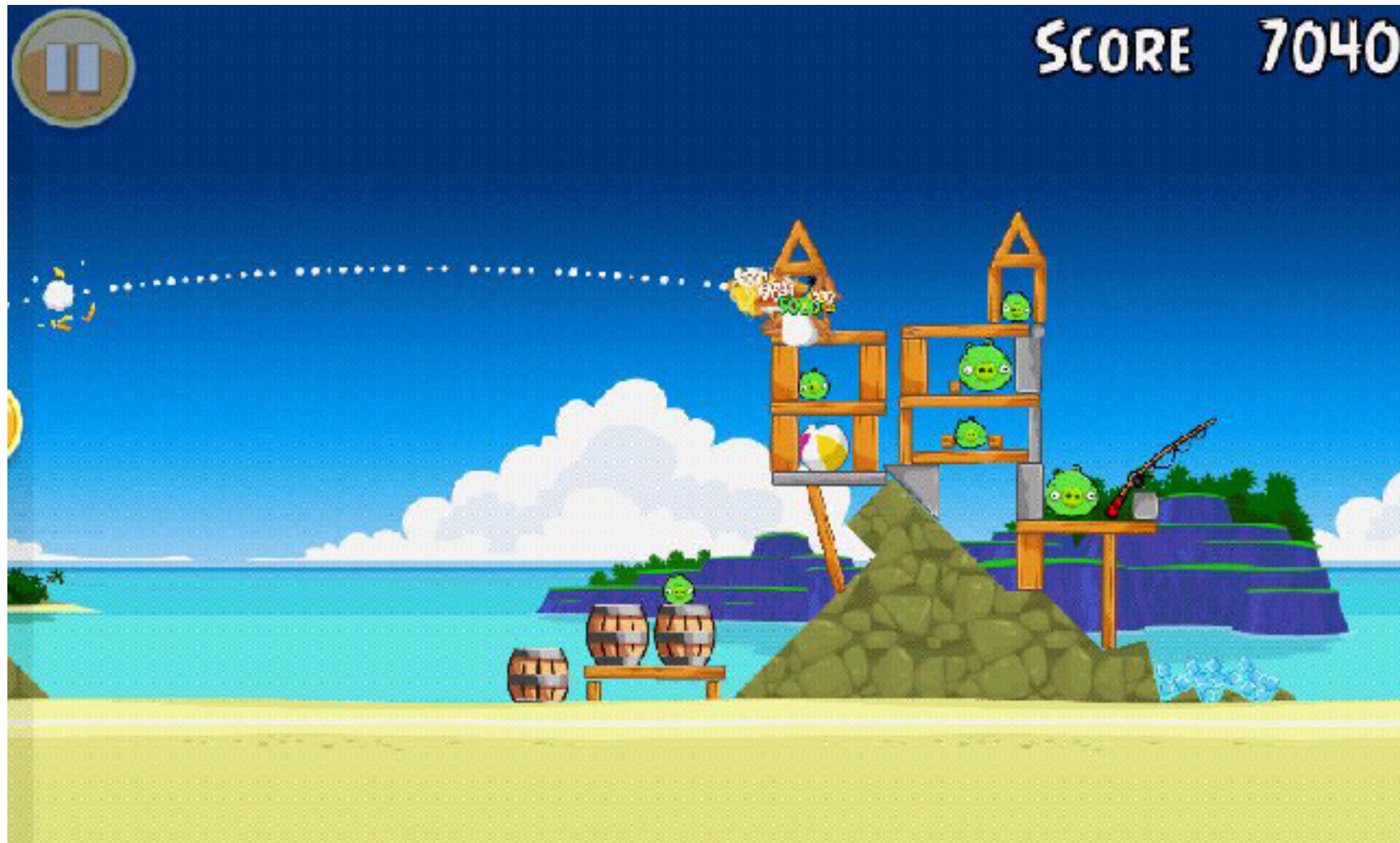
Drehimpuls



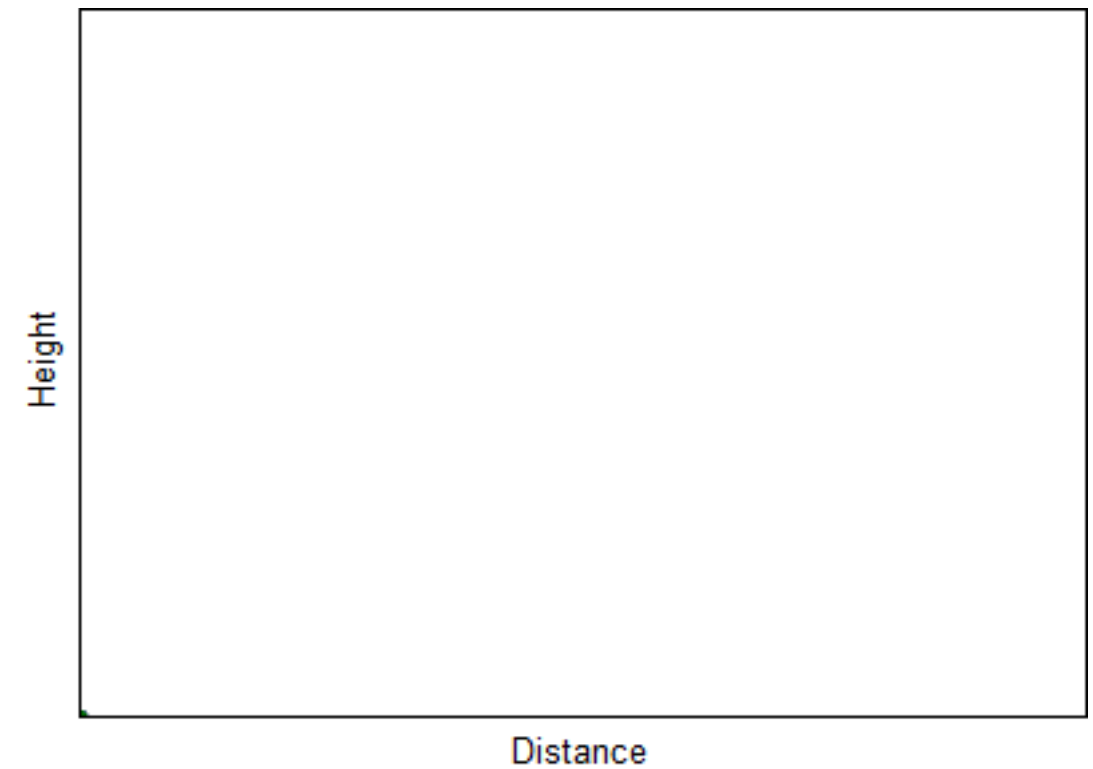
<http://www.kongregate.com/games/ttursas/imperfect-balance>

Imperfect Balance

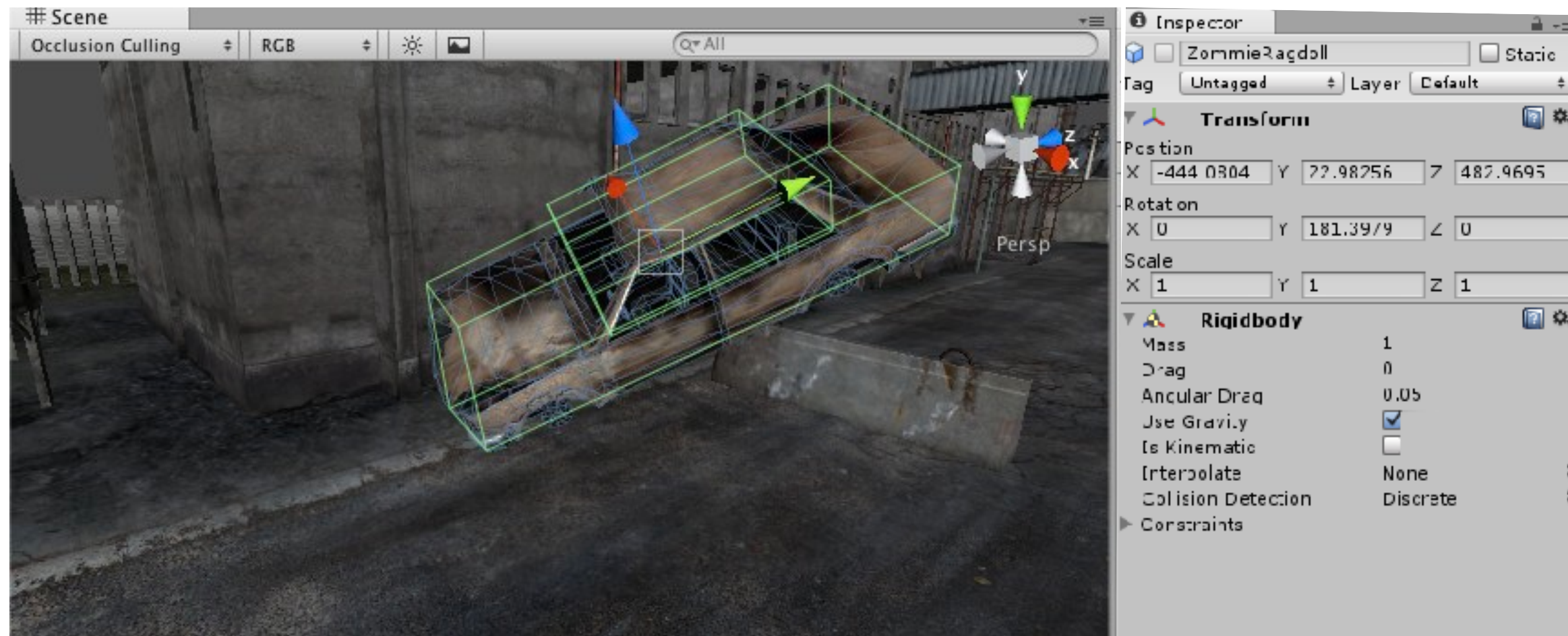
Ballistik



Angry Birds



Unterschiedliche Flugbahnen bei einem [schiefen Wurf](#) ohne jegliche Reibung (Schwarz), mit [Stokes-Reibung](#) (Blau) oder mit [Newton-Reibung](#) (Grün)
<http://de.wikipedia.org/wiki/Ballistik>



Position (3 Koordinaten)

Orientierung (Rotation um 3 Raumachsen)

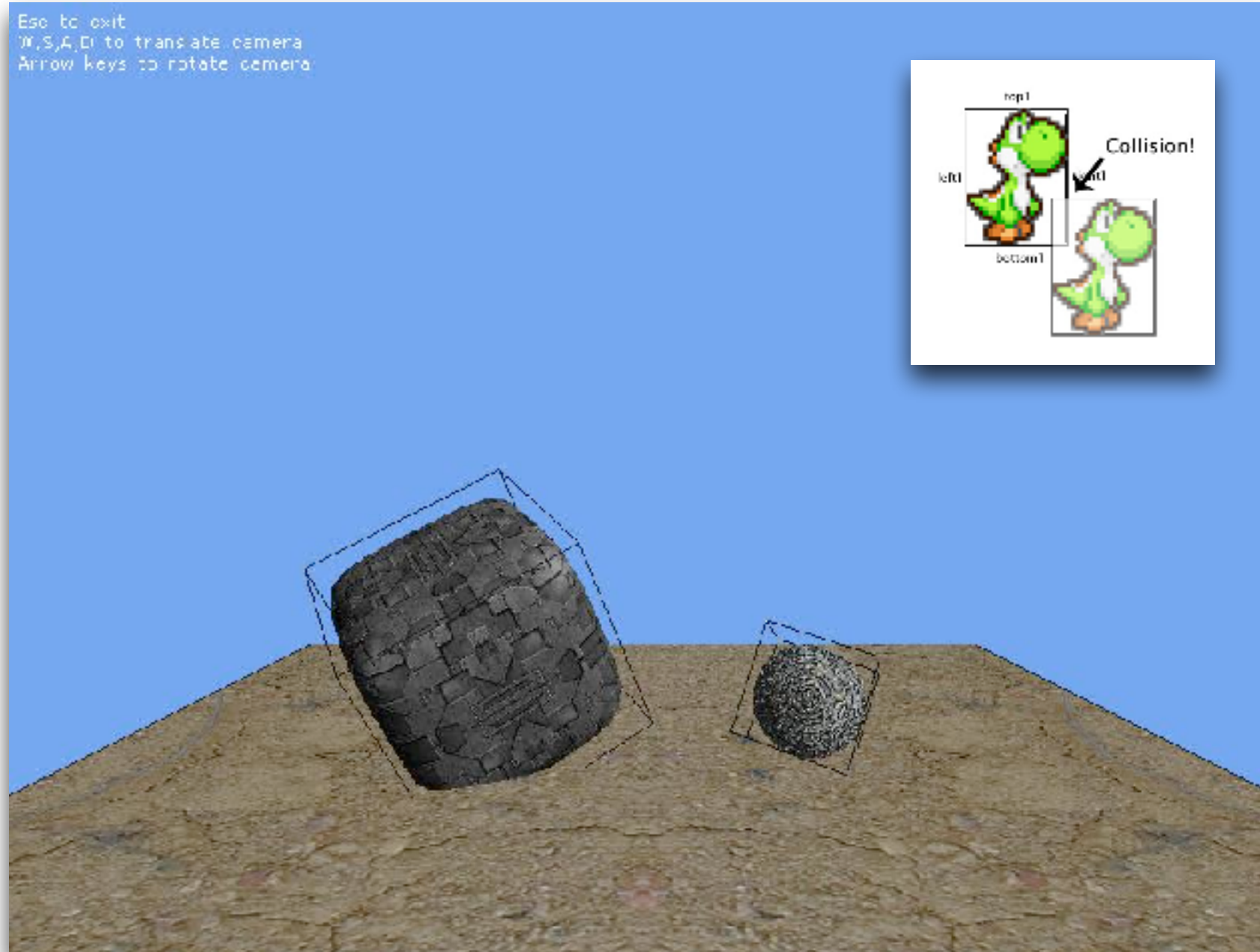
Masse

Impuls (Masse * Geschwindigkeit)

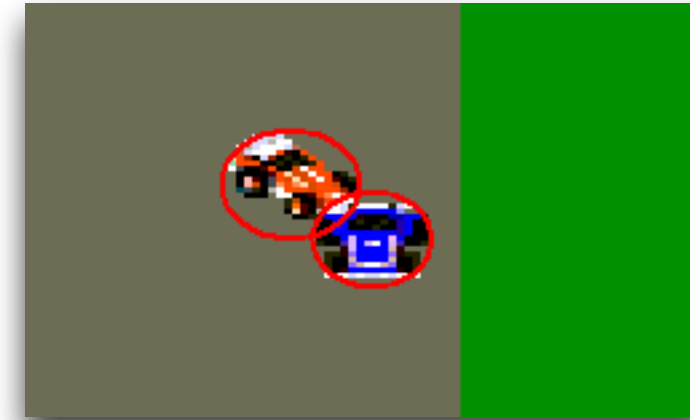
Drehimpuls (z.B. Kreisbewegung)

Festkörperphysik

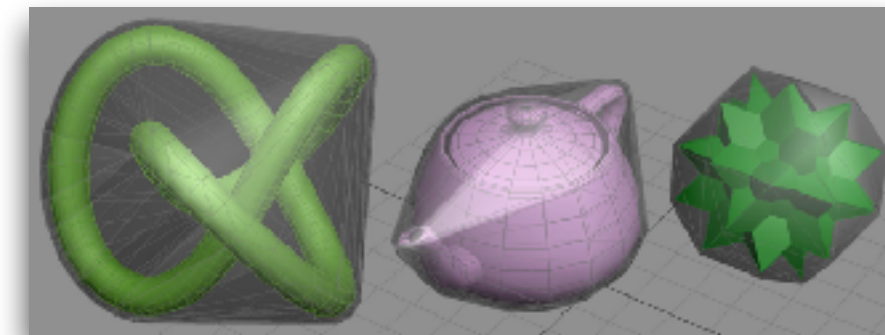
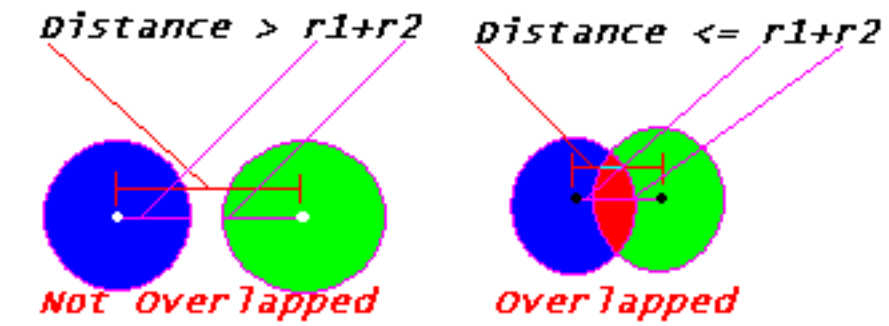
Kollisionen



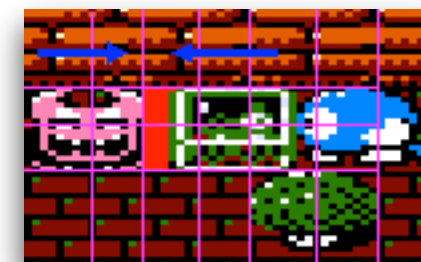
Bounding Box



Bounding Circle



Convex Hull



Grid Based

Ragdoll Physics



Turbo Dismount

Umgebungsphysik



Realistic environmental physics

Trespasser (1998)

Ragdoll physics started here, as did the idea of physics puzzles in a shooter. You could throw objects at other objects, and they'd react in an almost-realistic way, which was pretty novel for the time.

<http://www.gamesradar.com/gamings-most-important-evolutions/?page=7>

<https://www.youtube.com/watch?v=i6cWEbkBeZQ>

Fracture Physics



<https://www.youtube.com/watch?v=ATU6IGCMpUA>

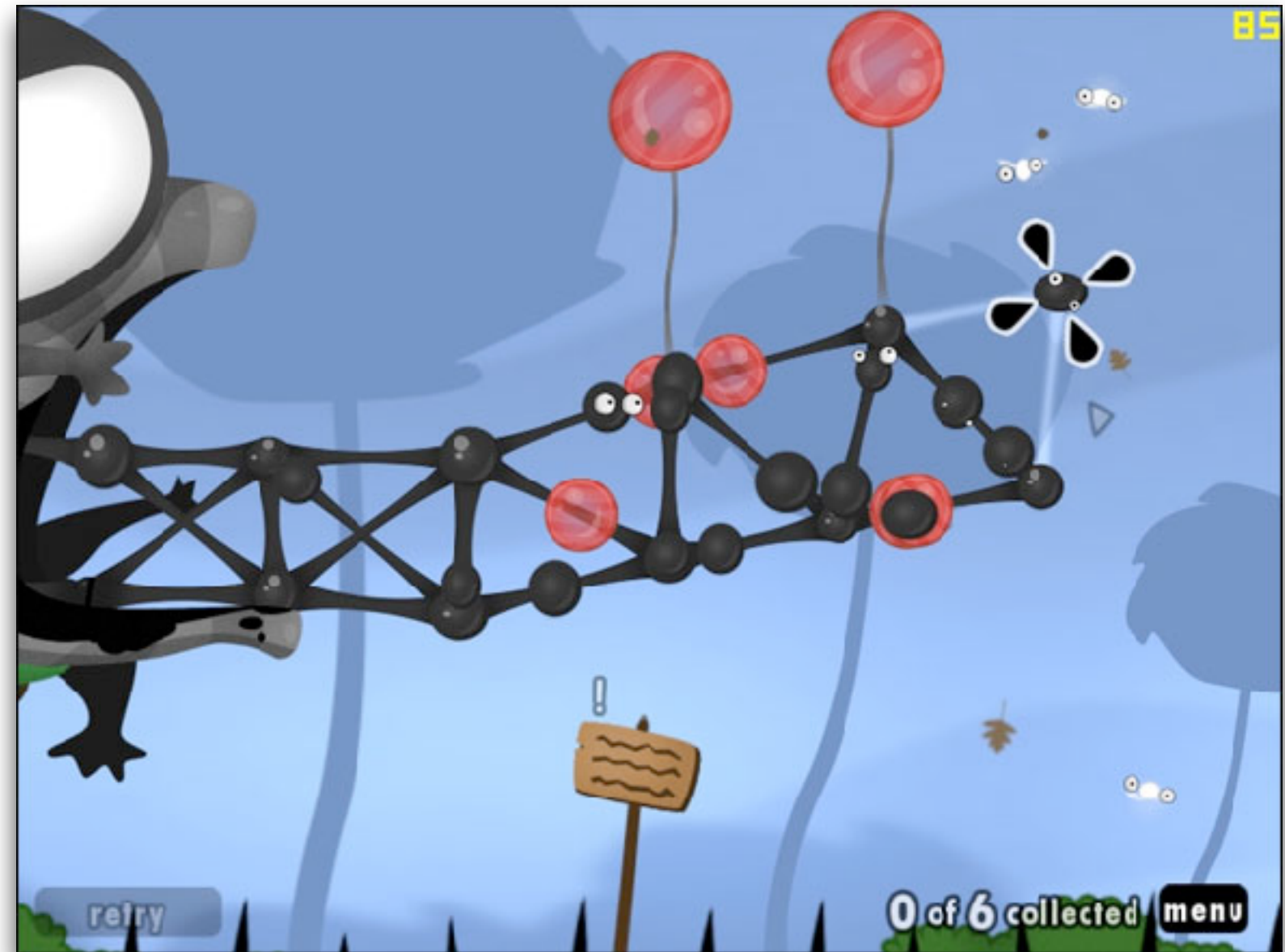
Killzone 2

Soft Body Physics

Seile und Federn



Cut the Rope



World of Goo

Oberflächenverformung



Jelly Car



Tearable Cloth

PhysX ON

PhysX OFF

Kleidung (Cloth)

02:48

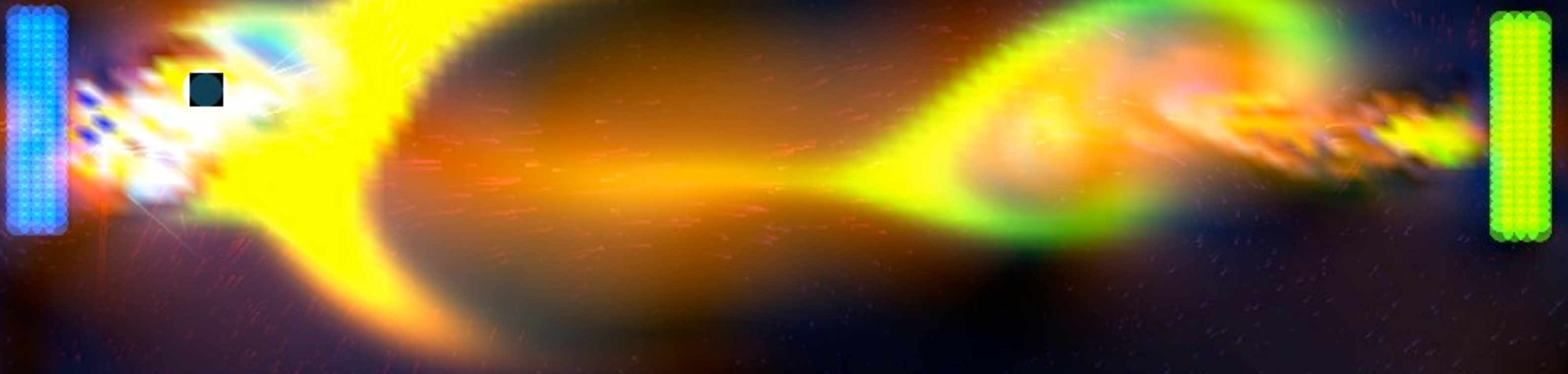
Wasseroberflächen



Crysis

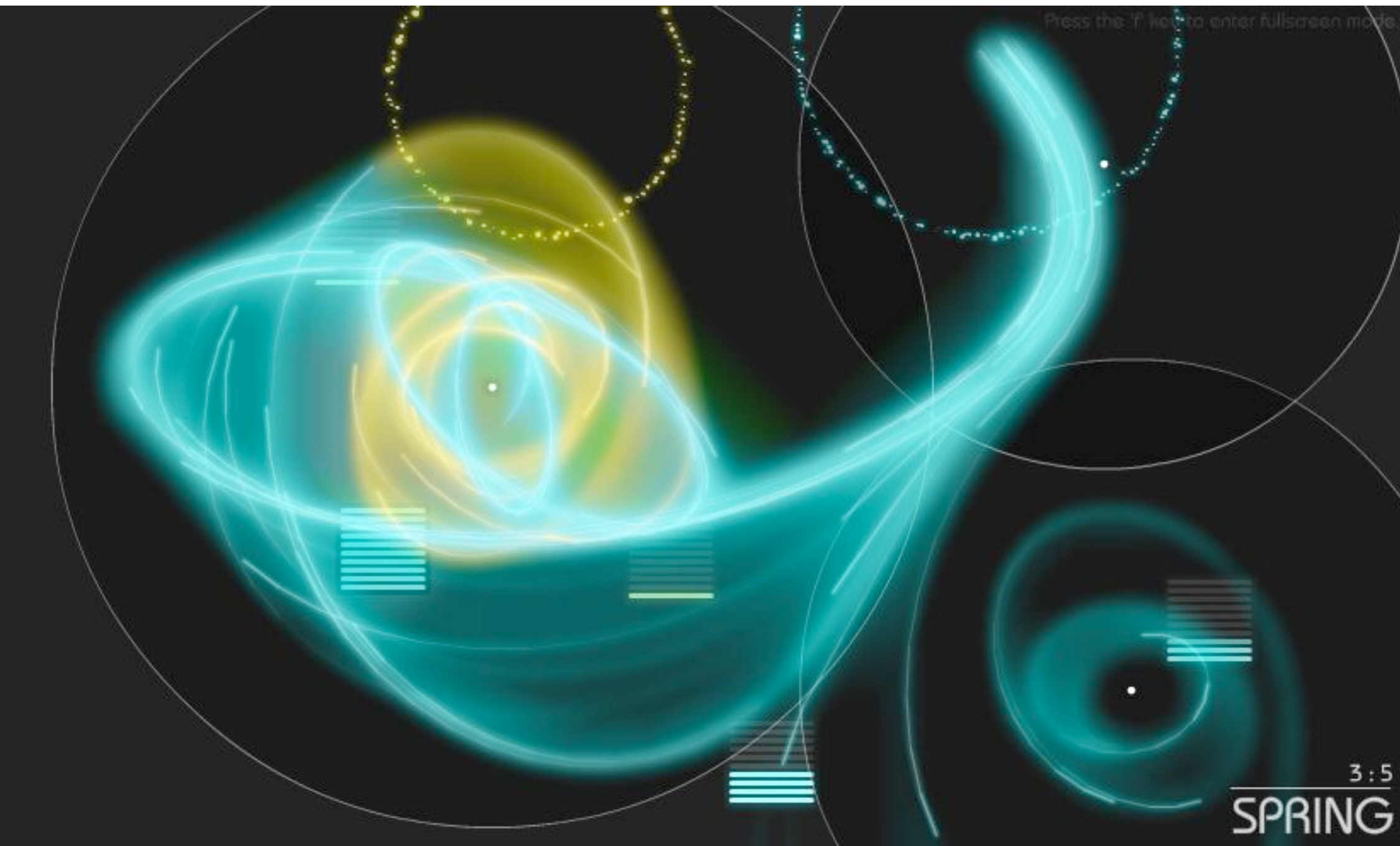


Strömungsdynamik



Plasma Pong

Partikelströme



<http://www.playauditorium.com/>

Auditorium

SCORE
279,775

UUUU

HIGHSCORE
279,775

Partikel: Explosionen, Feuer

20
20
20

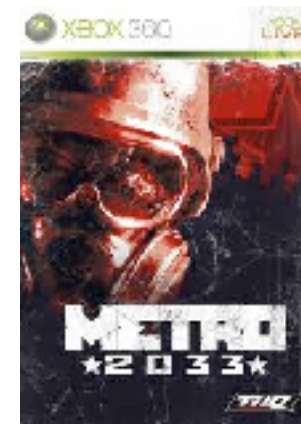
10
20
20
MULTIPLIER
2

10

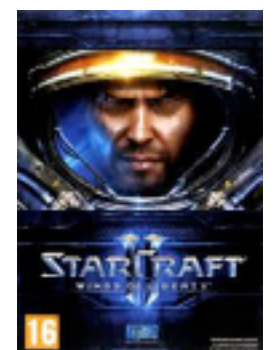
Physik Engines

PhysX[®]
by NVIDIA

<http://physxinfo.com/>



havok[®]



Open Source Physik Engines



http://ode-wiki.org/wiki/index.php?title=Products_that_use_ODE

