

**Physics**

**How to Use**

You can move around the scene using the joystick at the bottom of the screen. The bottom-left button will return you home to where you started. The bottom-right button puts you in presentation mode where all other users will come to you and follow you when you move. You can jump to other worlds by simply clicking on their cards.

**Click or scroll down to continue…**

**Technical Overview**

Physics demonstrates how we use Rapier to provide a interactive, perfectly synchronized physics simulation in Croquet. Rapier is an extremely fast and powerful physics engine written in Rust and running in WebAssembly.

**Behaviors**

Physics uses several different Croquet behaviors to create this world.

**cascade.js**

xyzzy

**earth.js**

xyzzy.

**gridBlock.js**

xyzzy.

**pool.js**

**menus.js**

The menus behavior simply installs a number of additional menus that can be used to add and remove bots and toggle the sound on and off.

**lights.js**

The lights behavior is used to generate the cascaded shadow map and load and construct the background sky. I have not added shadows to the ground or grass, but you can see them in the temple and on the tree.

The background sky is also loaded by this behavior into the scene background.

**pdfview.js**

The PDF viewer, which is likely where you are viewing this document, is used to add documents into a world.

**Github**

The source for the Physics world behaviors is available via the menu and on Github here:

<https://github.com/croquet/physics>

**Credits**

THREE.js Mr Doob on Github

Rapier Sebastien Cruzet <https://rapier.rs/>

Above the Clouds texture from HDRMaps.com