Abstract: In order to bring the virtual world ever closer to the precipice of reality, physicists and computer scientists have worked extensively to design complex physics engines. These engines can perform operations at unimaginable speeds, simulating physics in real time in order to produce a believable virtual simulation. They are imperative to the progression of modern computational physics, allowing physicists to perform things as large as cosmological simulations on a computer. But what about their potential for play? Physics engines have long been used in the development of video games, but the virtual world doesn't have to play by the rules of our universe. Come find out more about what happens when we open up the physical world—and start editing its code.

BEN GROSS '19 will also present his senior capstone talk in physics.