

## Oso Spells Documentation

Spell props are designed as a base and an effect attached to that base. Most of the materials need to be applied to the effect, except for a small number of base materials (Blank and hot ball, for example).

There are many possible ways to manipulate the shape and look of the effect even without applying materials; scaling on the base will affect elements of the effect. For example, if the Y scale on the base is reduced to 25%, the base is a flattened sphere, and the emanations from it are 'squashed' on the Y direction.

If you want the emanations to retain their normal proportions, select the effect and apply the inverse of any scaling. For example, set Y scale on the base to 25% and then Y scale of the effect to 400%. This will keep the emanations looking mostly as they did before, but the arrangement will be 'pulled' along the Y axis, creating a column.

### Under the Hood

Ultimately, Oso Spells is a bit like other systems where plane has a cutout applied to it and various surface settings. However, the planes used are dForce Hairs, opening up a number of possibilities.

The number of planes/hairs can be controlled simply by adjusting PS Hairs Density, as can scale. And, even better, dForce allows the emanations to move as the spell is run through a simulation. For effects that should rise, like smoke and fire, you can set gravity to a negative value.

### Tessellation

One important element to dForce Hair is tessellation. This defines the shape of each 'hair.' Most spell effects are at tessellation 2; flat series of polygons. A few spell effects are set to tessellation 3, tubular emanations (tentacles, lightning).

In a few cases you may want to use smoothing, particularly with tentacles, to get less angular looking shapes, or increase subdivision.

Normally you wouldn't use subdivision or smoothing with dForce Hair, but it works nicely for some of these effects.

### Movement

Many cool effects can be achieved with a timeline animation, allowing the spell to move in a given direction.

The ring and ring spiral spells have a timeline built in and are animated; be sure to set timeline to the end to see the full effect.

### Bloom

The two lightning render settings help create just enough bloom to enhance the look of lightning. Increasing the bloom threshold will decrease the intensity and vice versa; feel free to adjust to attain the style you want.

