

## Spring Force

```
void spring::CalculateForce(void)
{
    vector u = p1->position - p0->position;
    double len = u.length();
    u /= len;

    double vel0AlongLength = dot(p0->velocity, u);
    double vel1AlongLength = dot(p1->velocity, u);

    double dLength = vel1AlongLength - vel0AlongLength;

    double ForceMagnitude = -k * (len - restLen) - fricCoef * dLength;
    u *= ForceMagnitude;

    p1->acceleration += u;
    p0->acceleration -= u;
}
```