

## **Mathematik einer Physik Engine**

Angular Speed

Origin and Center of Mass

Euler Angles

Axis-Angle

Rotation Matrices

Quaternions

Velocity of a Point

Angular Acceleration

The Matrix Classes

Matrix Multiplication

Matrix Inverse and Transpose

Converting a Quaternion to a Matrix

Transforming Vectors

Changing the Basis of a Matrix

Normalizing Quaternions

Combining Quaternions

Rotating

Updating by the Angular Velocity