

Medical Robotics

Rigid Body Kinematics

Sivakumar Balasubramanian

Department of Bioengineering
Christian Medical College Vellore

What is a rigid body?

Math Preliminary: Matrices

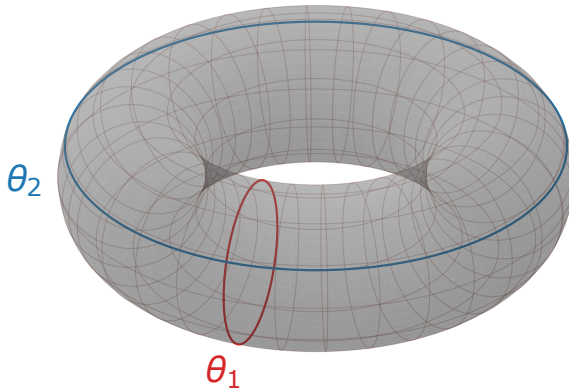
Math Preliminary: Four view of matrix multiplication

Math Preliminary: Matrices represent linear transformations

Math Preliminary: Rank of a matrix

Math Preliminary: Matrix inverse

\mathbb{T}^2 torus representing the C-space
of a RR robot.



Matrix inverse

Math Preliminary: Change of basis

Some more definitions and conventions