

# Statics and Kinematics of frameworks in Euclidean and non-Euclidean Geometry

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# 1 Introduction

- Bar-Joint framework
- Rigid Bars & universal Joints
- Arm vs. Robotic arm  
this is flexible framework  
sometimes want rigid frameworks i.e Bridge no universal joints but we can assume them to be and investigate when and how they change
- rigidity
  - statically rigid
  - rigid
  - Infinitesimally rigid
- Definition of  $\mathbb{E}, \mathbb{S}, \mathbb{H}$

## 2 Kinematics

1. Definition framework