

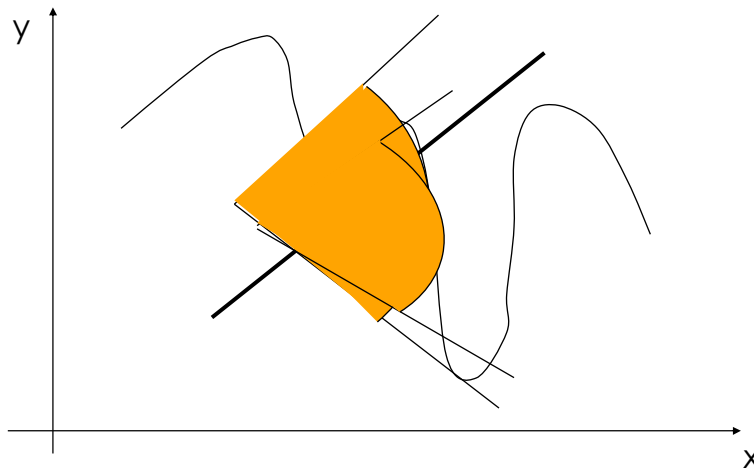
SMARTANALYZER

Ing. F. Menegoni, Ing. C. Rigoldi

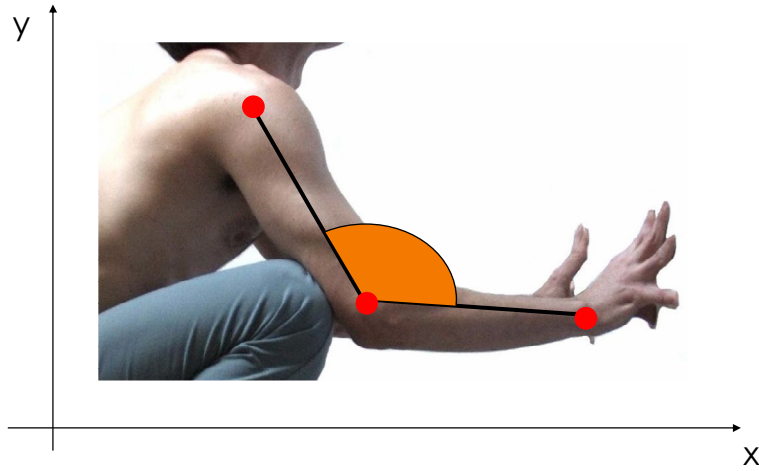
Laboratorio di Analisi della Postura e del Movimento "Luigi Divieti"



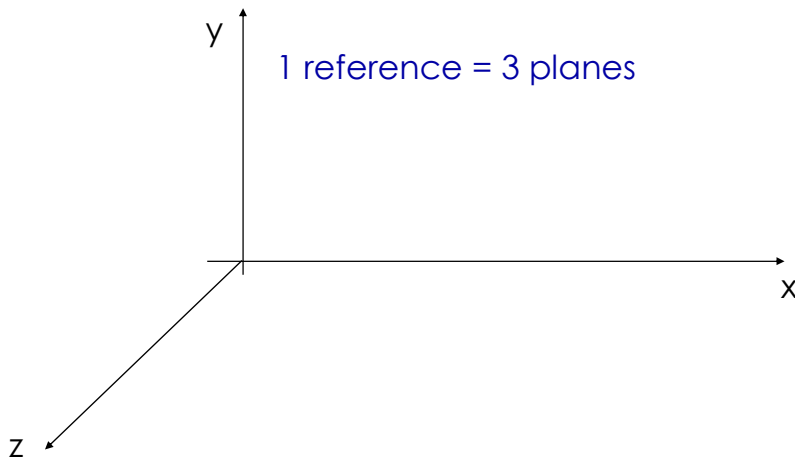
Few words about geometry: 2D



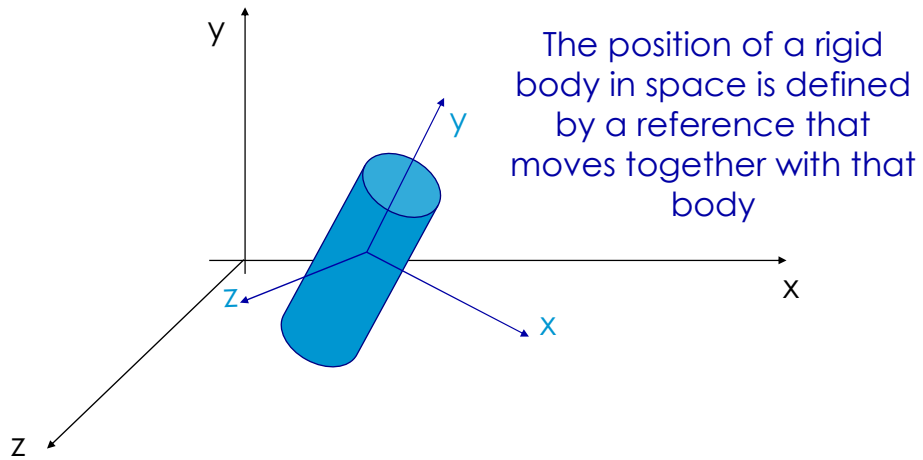
Few words about geometry: 2D



Few words about geometry: 3D

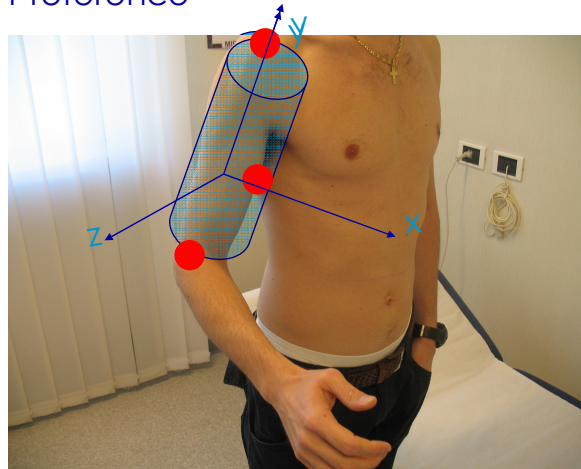


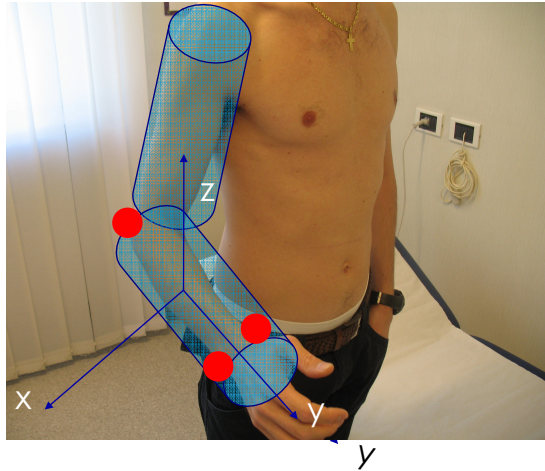
Few words about geometry: 3D



Few words about geometry: 3D

3 points = 1 reference





3 "convenient" planes



Flex-ext
Intra-extra
Abd-Add

Gaiton

Analysis

Lab

THE REQUEST



Experimental protocol

Movement selection



Marker placement



Working volume



Trial acquisition



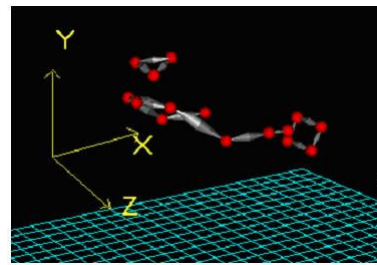
Trial processing



Not only gait



Biomechanical model



Working volume

System calibration and definition of working volume



Optimization



Trial acquisition

How many trials?

How long?

Starting point?

Ending point?

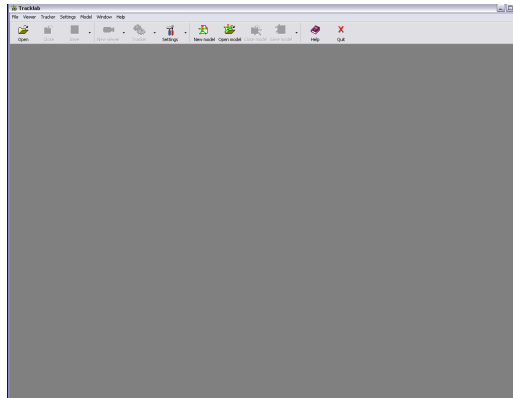
Resting time?



Influence results!!!

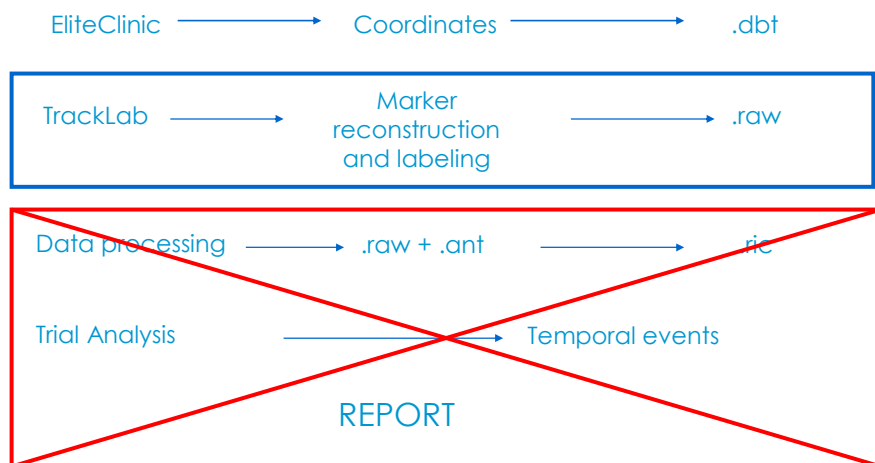
...and following considerations...

TrackLab: making a model

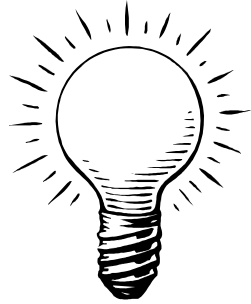


Marker reconstruction and labeling (.raw)

Not only gait: from acquisition to report



Mathematics to clinics



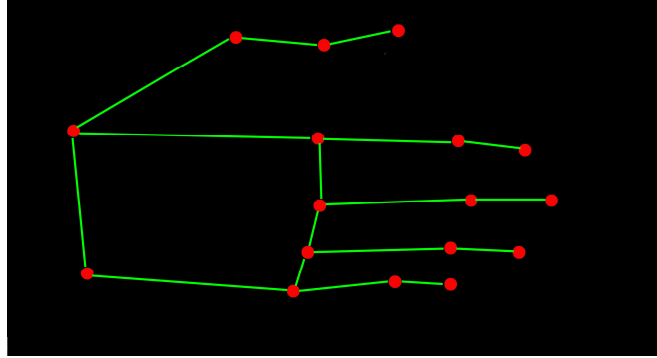
Event definition
Vector identification
Angle definition
Parameter computation
Etc...

Clinical report

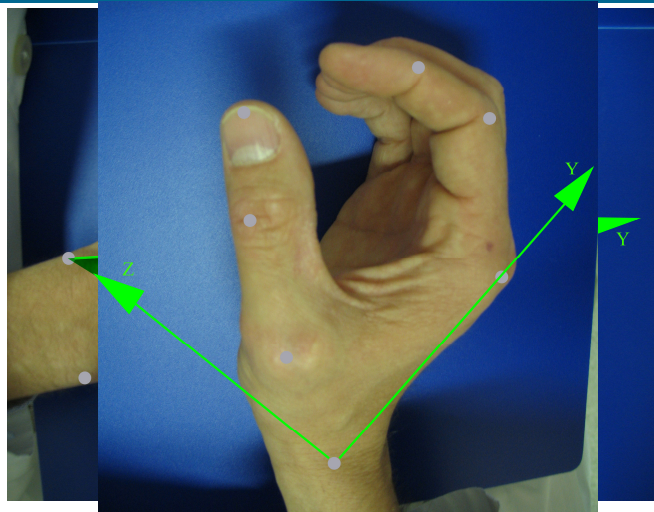
SMARTANALYZER



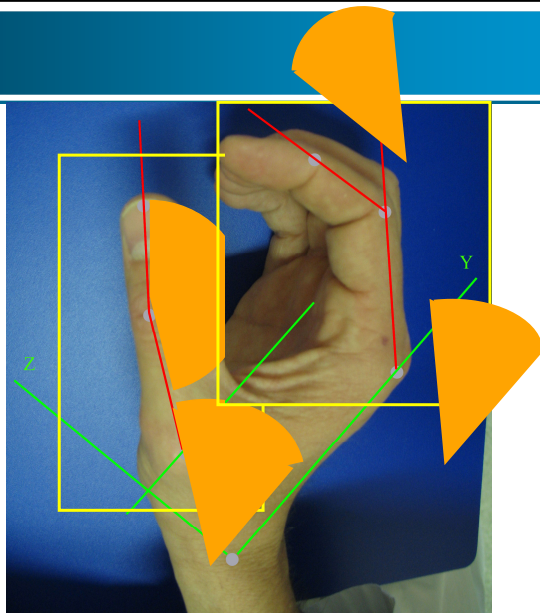
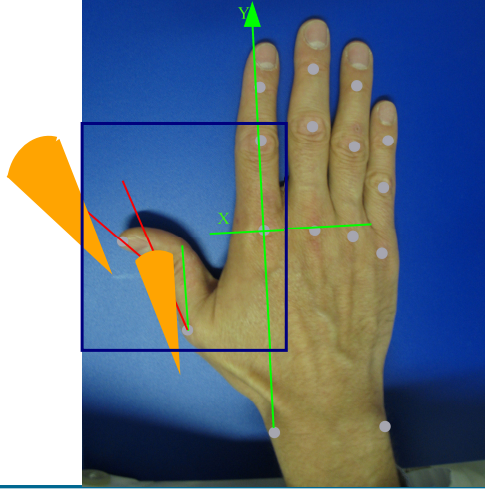
Hand



Hand: reference system



hand: kinematics



Hand: potential movements

