

Temporal Registration of CT, MRI, and Fluoroscopic Data

By Pierre Boulanger

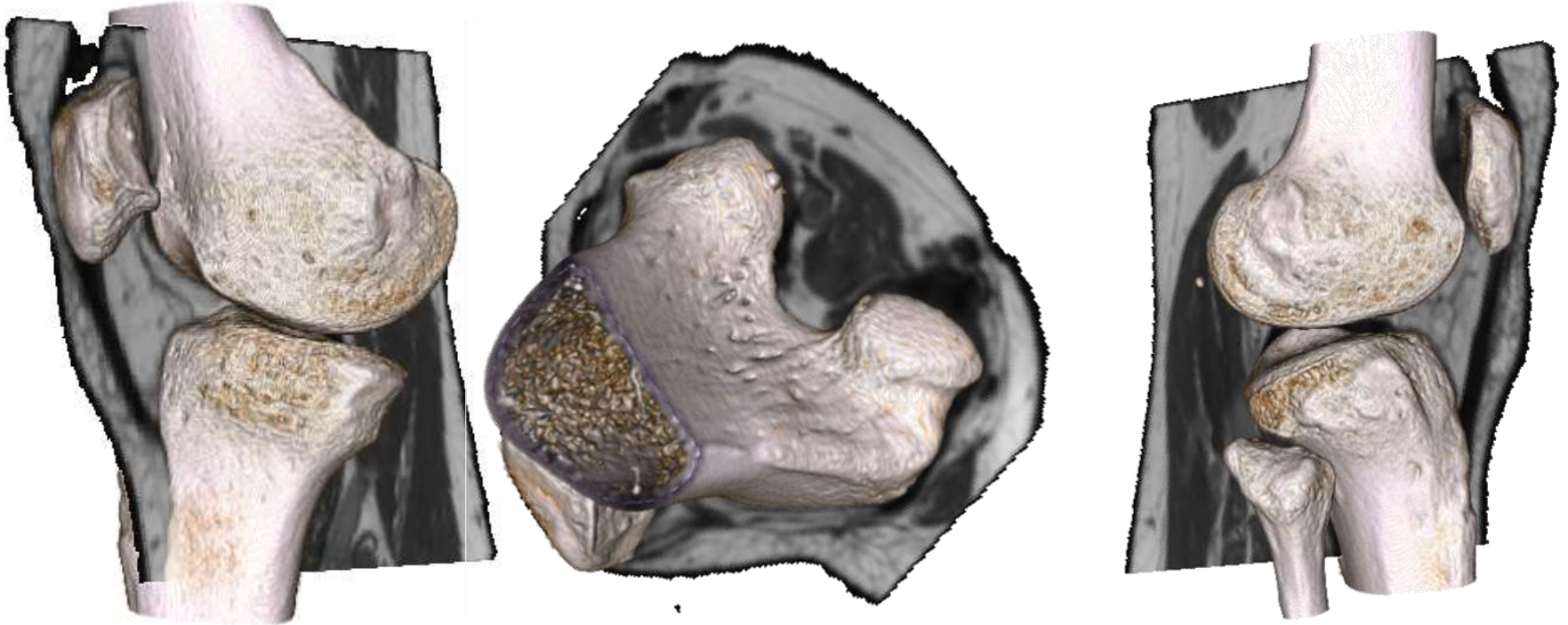
3D Bone Rendering



MRI Rendering



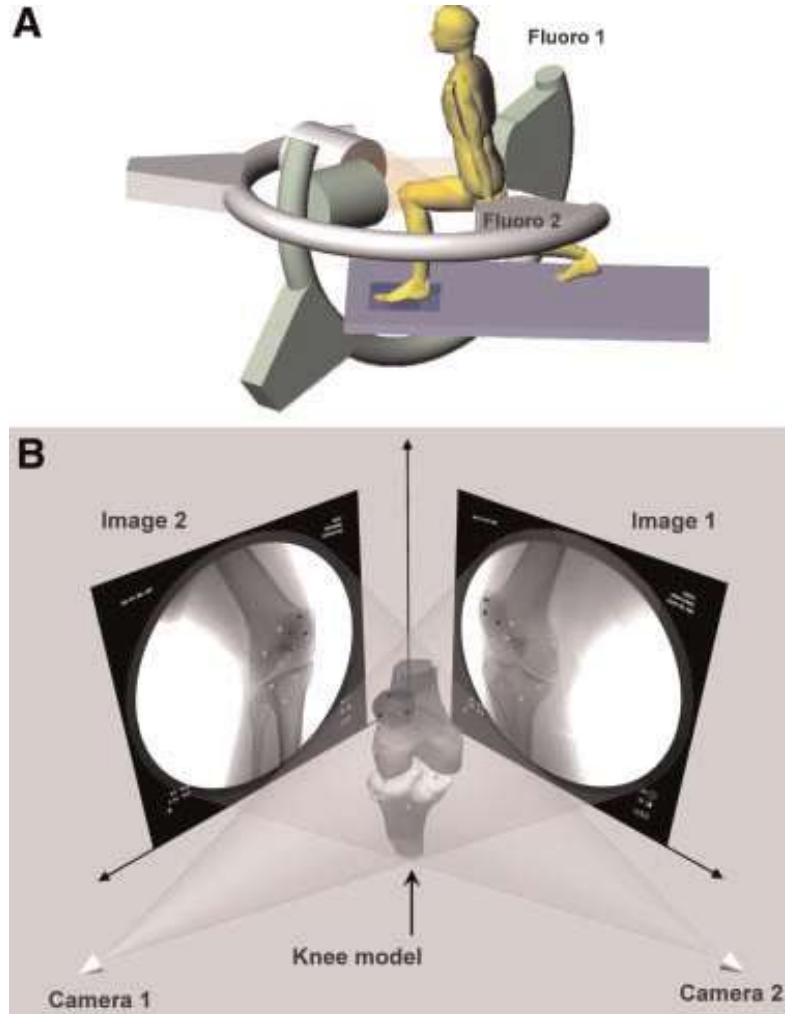
Registered CT+ MRI



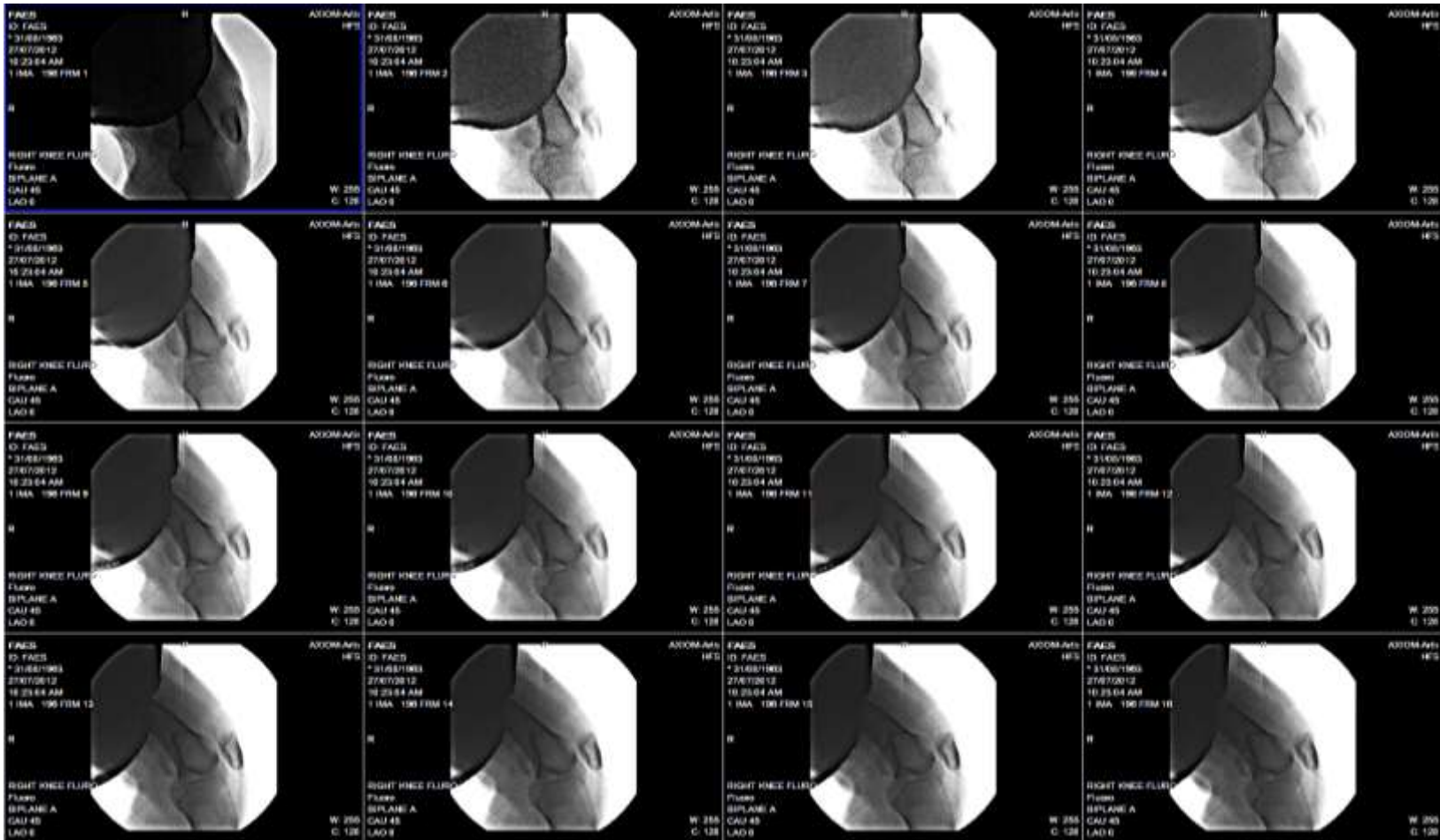
C-arm Position



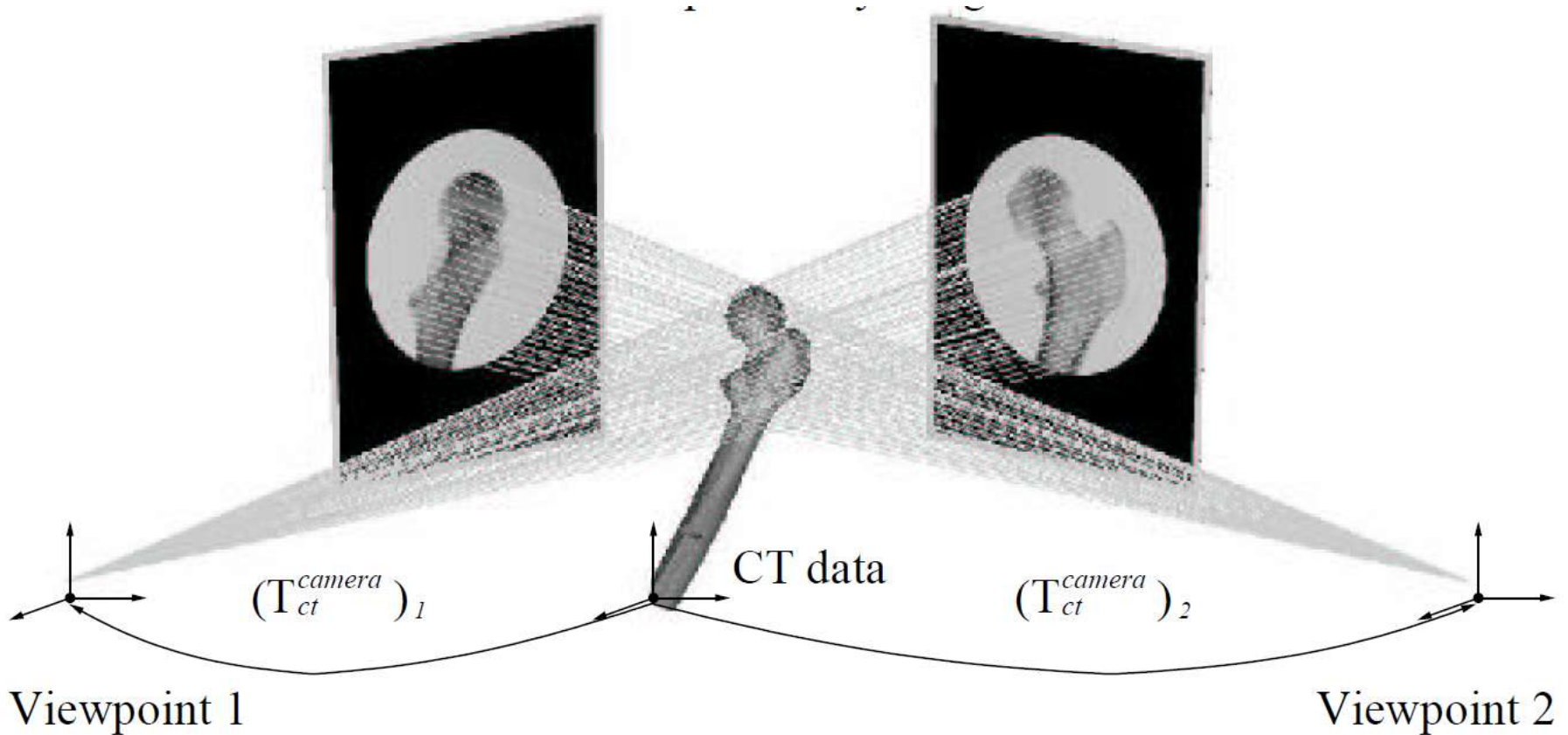
Fluoroscopic Machine



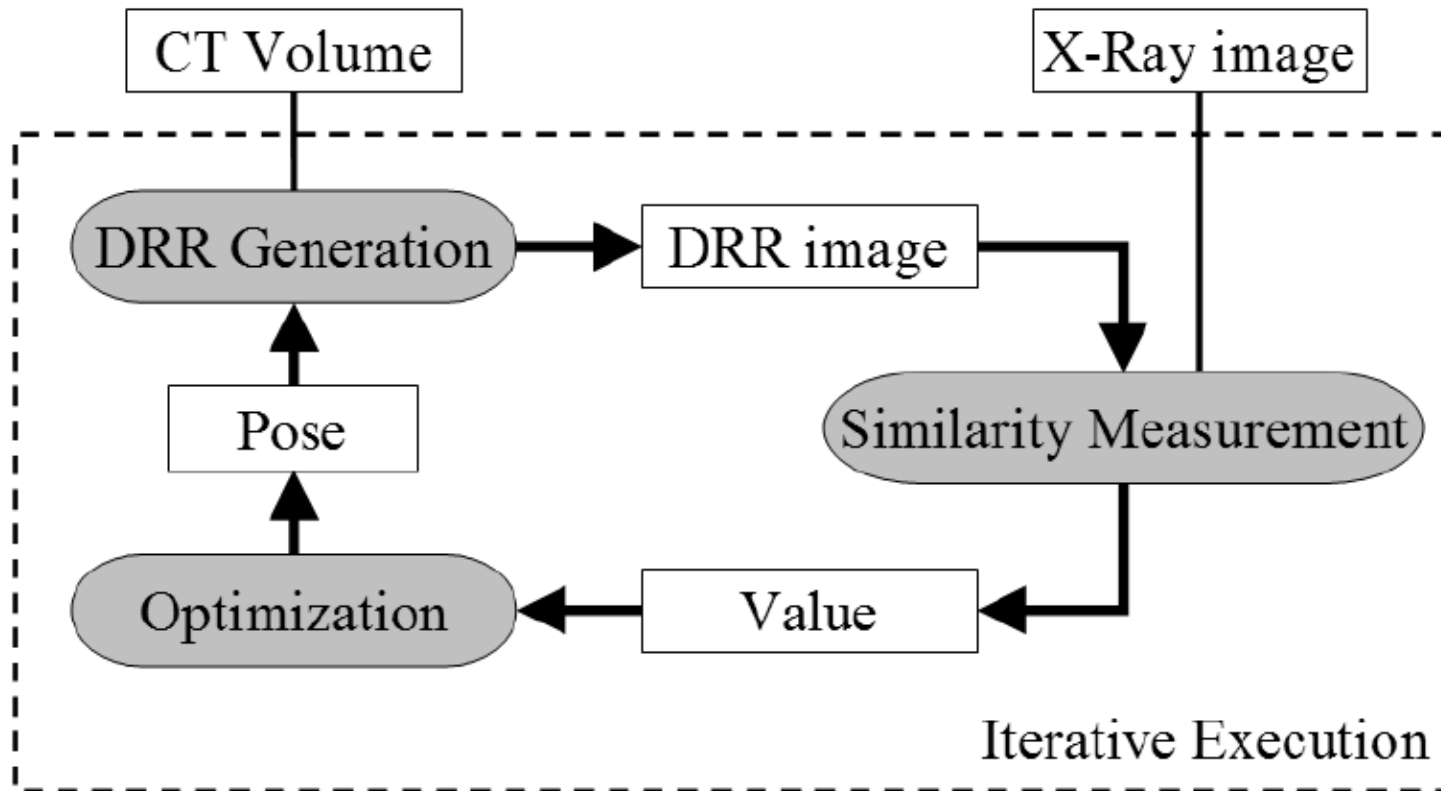
Fluoroscopy Image Sequence



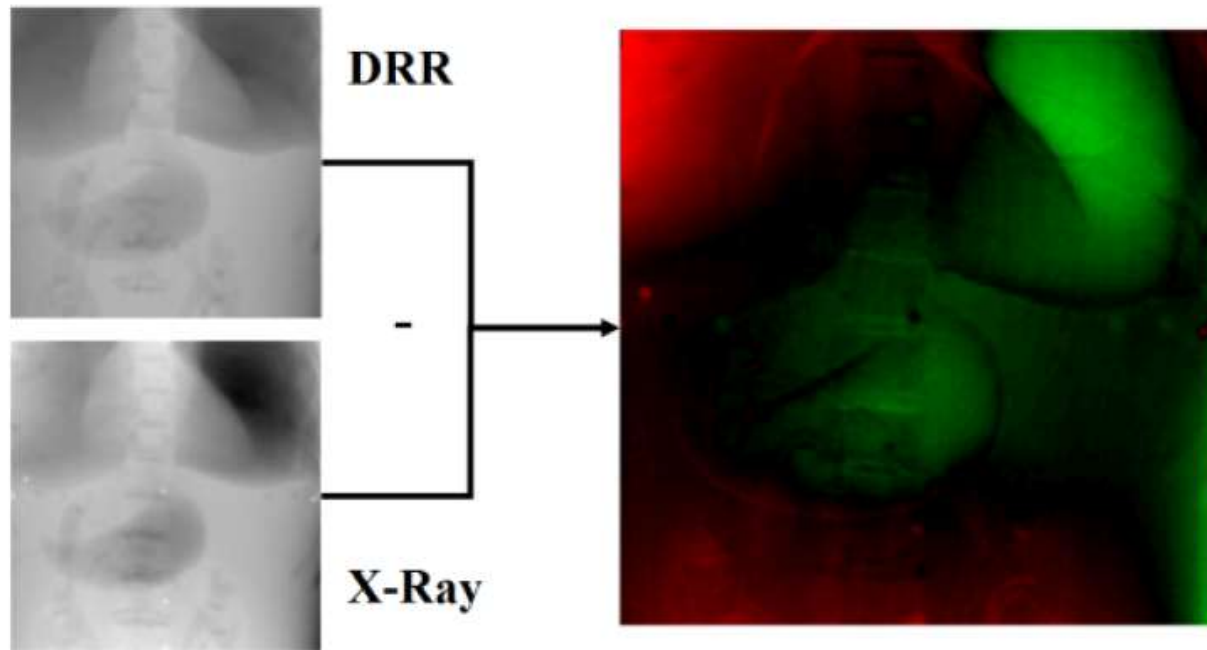
Pose Estimation of the Model from X-ray Fluoroscopic Image



Digitally Reconstructed Radiographs

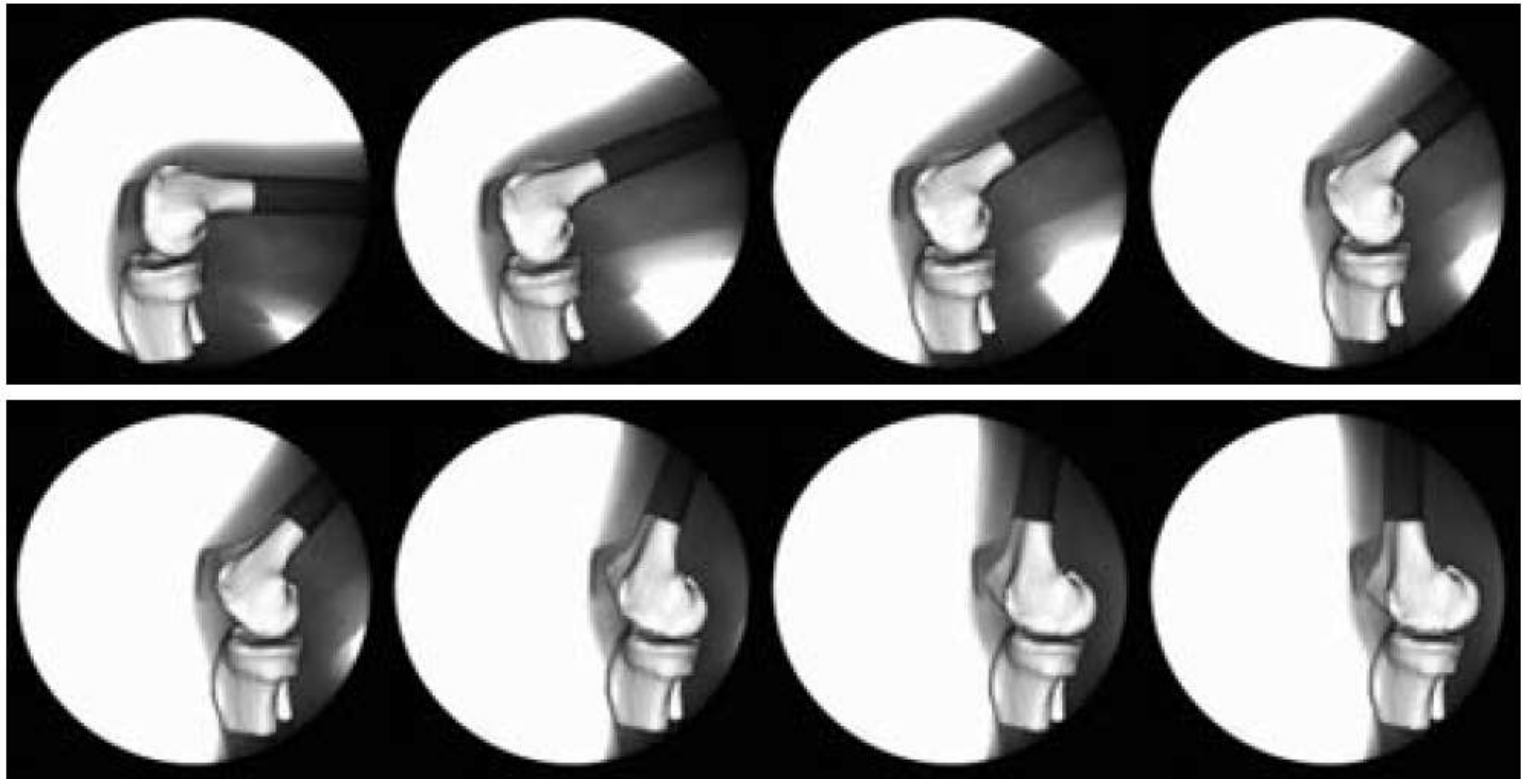


Difference Image from a DRR and X-Ray Image

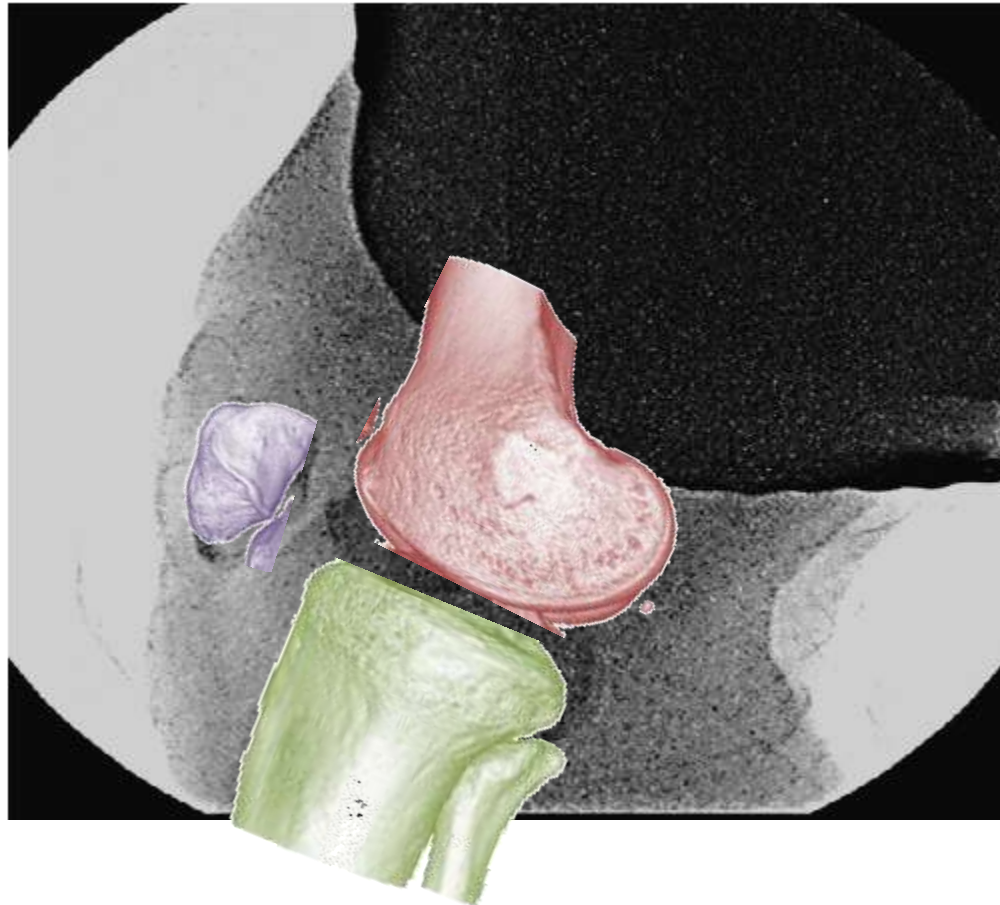


green=positive red=negative

Visualization of the Sequential Movement of Femur, Tibia/Fibura Model



Rough Hand Registration with Fluoroscopy Frame Using Templates



Next Step is Model Based Registration