

# Molecular Fusion

**Multidimensional data analysis software**  
**Versatile framework for medical research**

I.

## **AUDIT LOG**

Easy Configuration | Central Users Management  
Messaging, Notes, Todo communication between users



## **SCALABLE DATA MANAGEMENT**

Local, Server, Cloud

## **HETEROGENOUS GRID**

Scalable Computing Capabilities  
Local, Distributed, Cloud

II.

## **DATA FORMATS**

DICOM, NIFTI, Matlab | TIFF, JPEG | CNT (EEG)  
C3D (Gait analysis)



## **CALCULATION ENGINES**

Integration with ANTS, Python, Torch, MATLAB, R, PHITS,  
OpenFOAM | Quantum Computers  
Extensions programming in Java

## **PRECISE DATA VISUALIZATION**

Image fusion, MIP, Surface rendering | Curves, Tables  
Labels | Statistics | R

III.

## **APPLICATIONS**

Elastic matching | Filtering | Segmentation  
Normalization and Atlas-based segmentation



## **MULTICENTER STUDIES**

Project-based processing  
Population studies

**MULTIMODAL PROCESSING**  
**MRI, fMRI + EEG, CT, SPECT, PET**

IV.

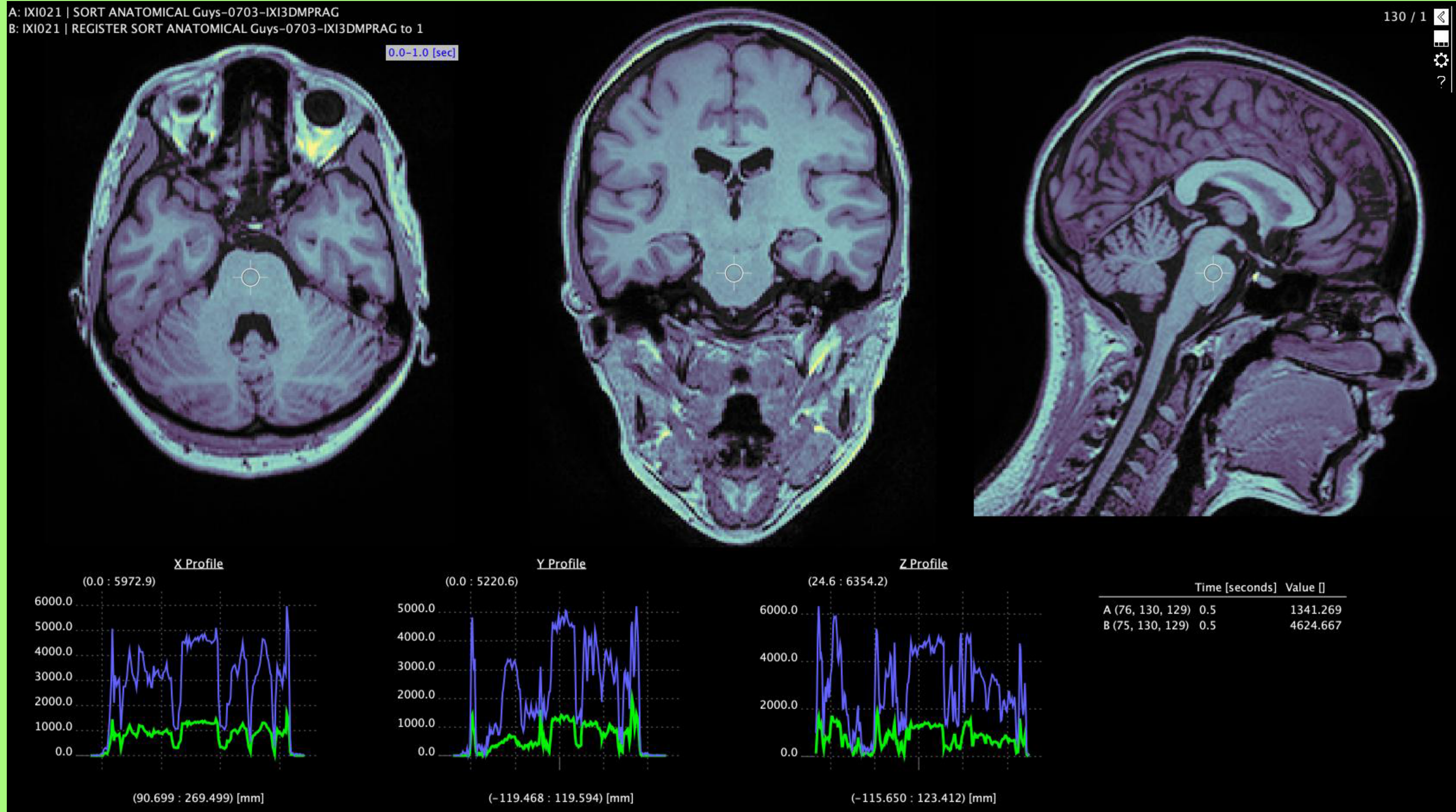
## **SPECT / PET Monte Carlo DOSIMETRY**

Machine learning Classification  
fMRI / EEG / PET Epilepsy analysis



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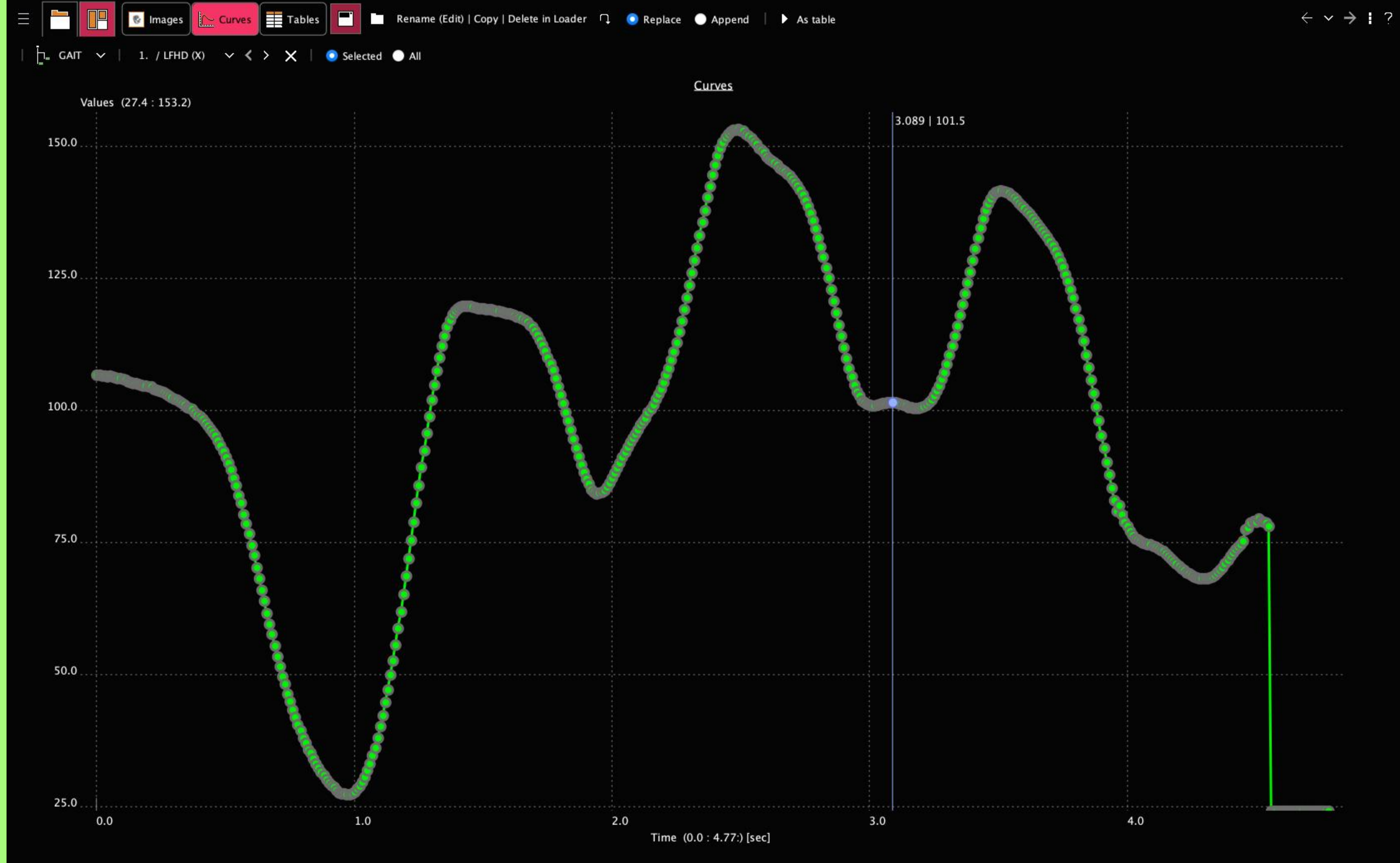




MRI Subject to Subject  
Elastic matching



Monte Carlo dosimetry  
preprocessing



Gait analysis