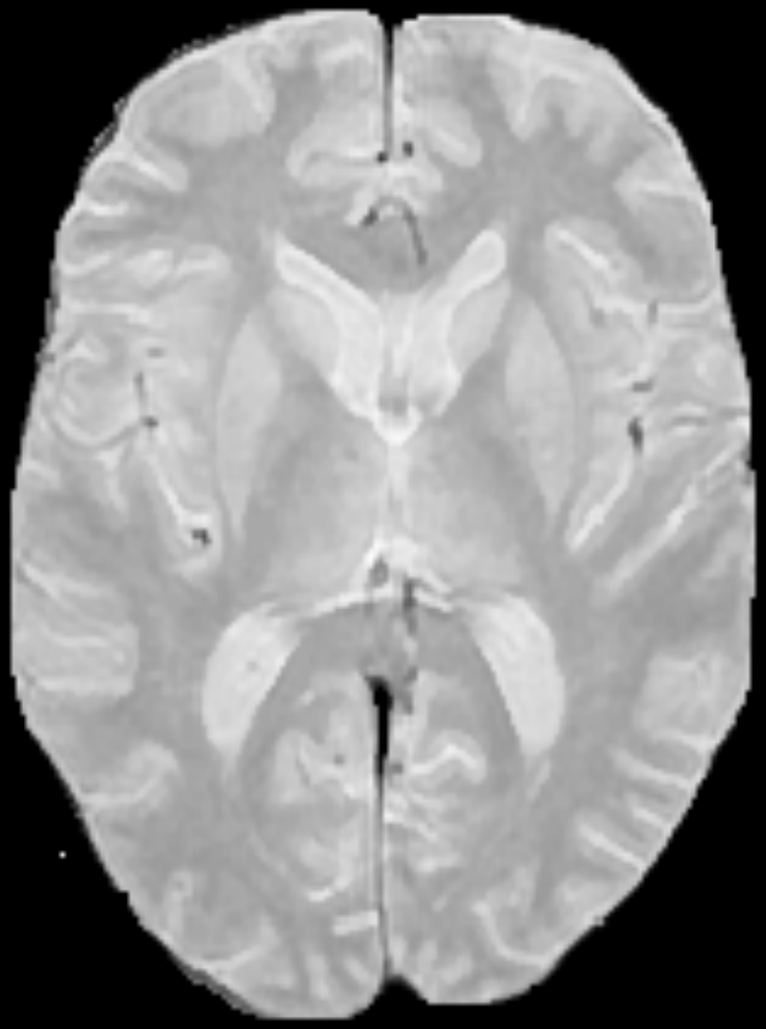
Traitement d’Images pour le Médical

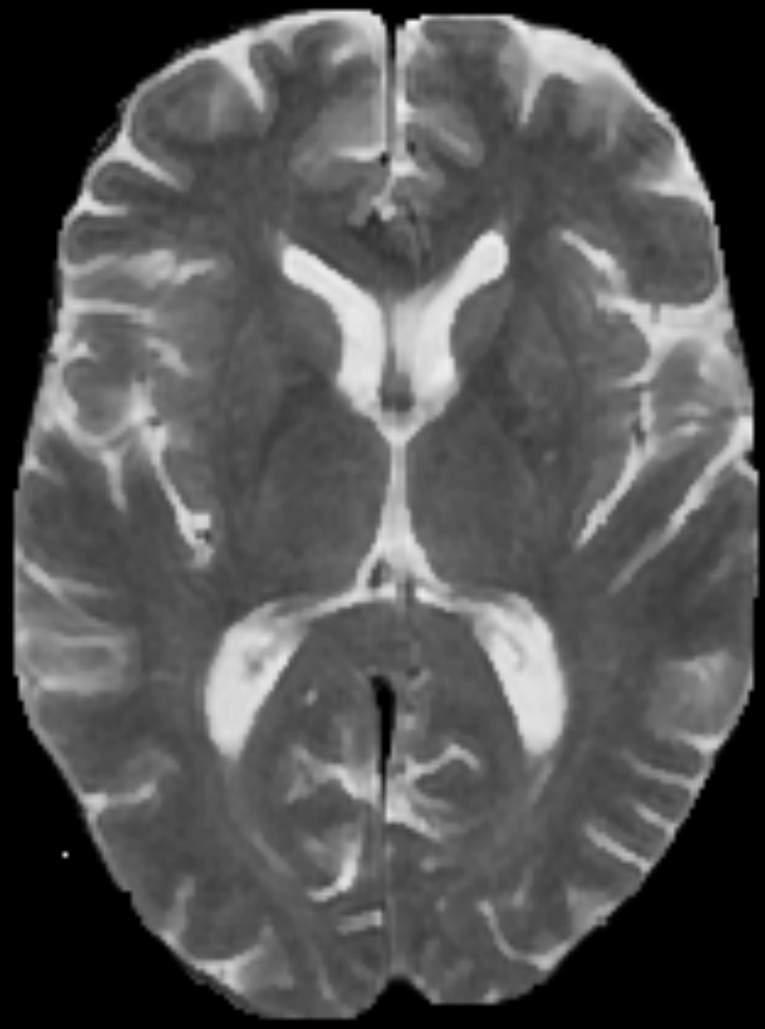
Quelques exemples applicatifs

Introduction

Segmentation

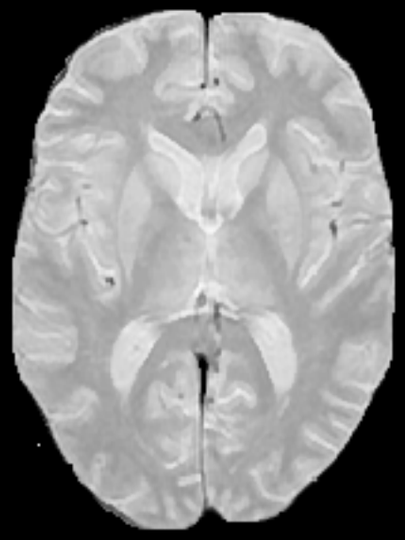


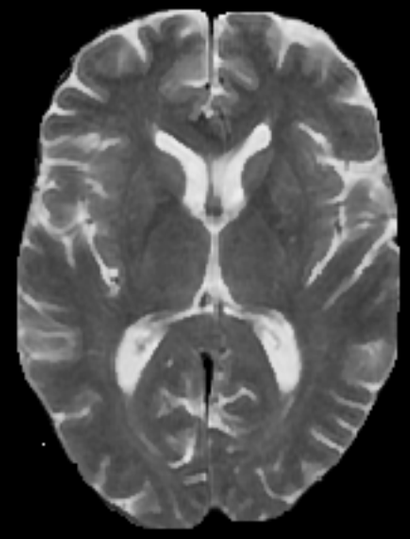
IRM en mode T1



IRM en mode T2

Segmentation





IRM T1

Méninges

Matière Blanche

IRM T1

IRM T2

Matière Grise

Liquide
Céphalo-Rachidien

IRM en

node T2

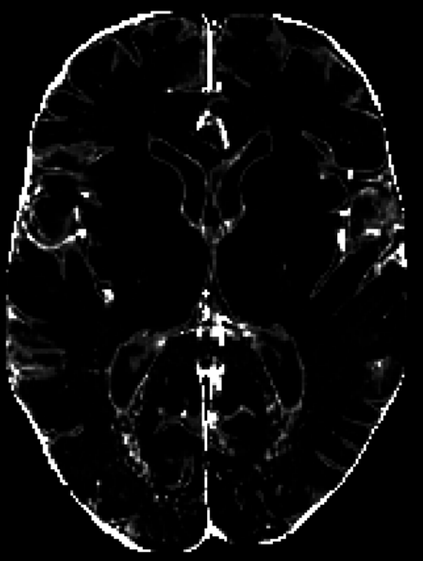
IRM T2

Segmentation

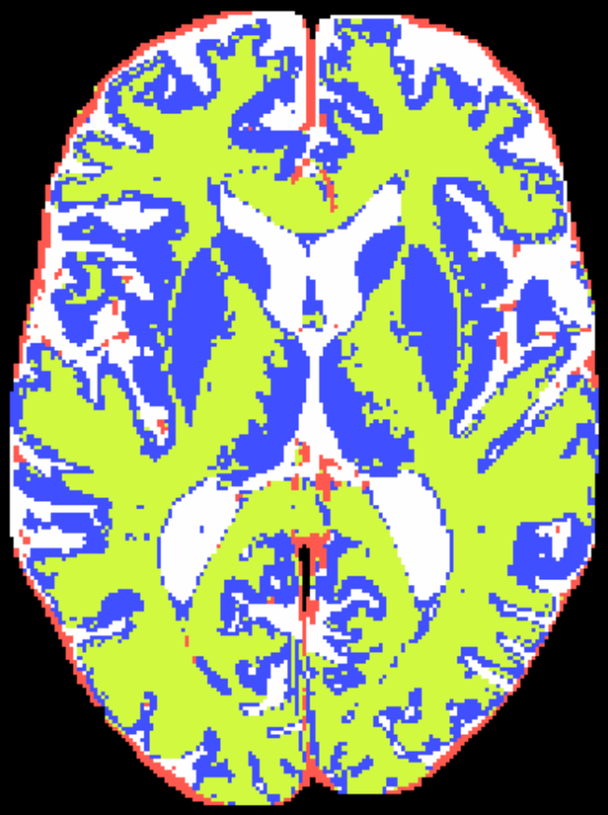
P(Matière grise)

P(Matière blanche)

P(Liquide CR)

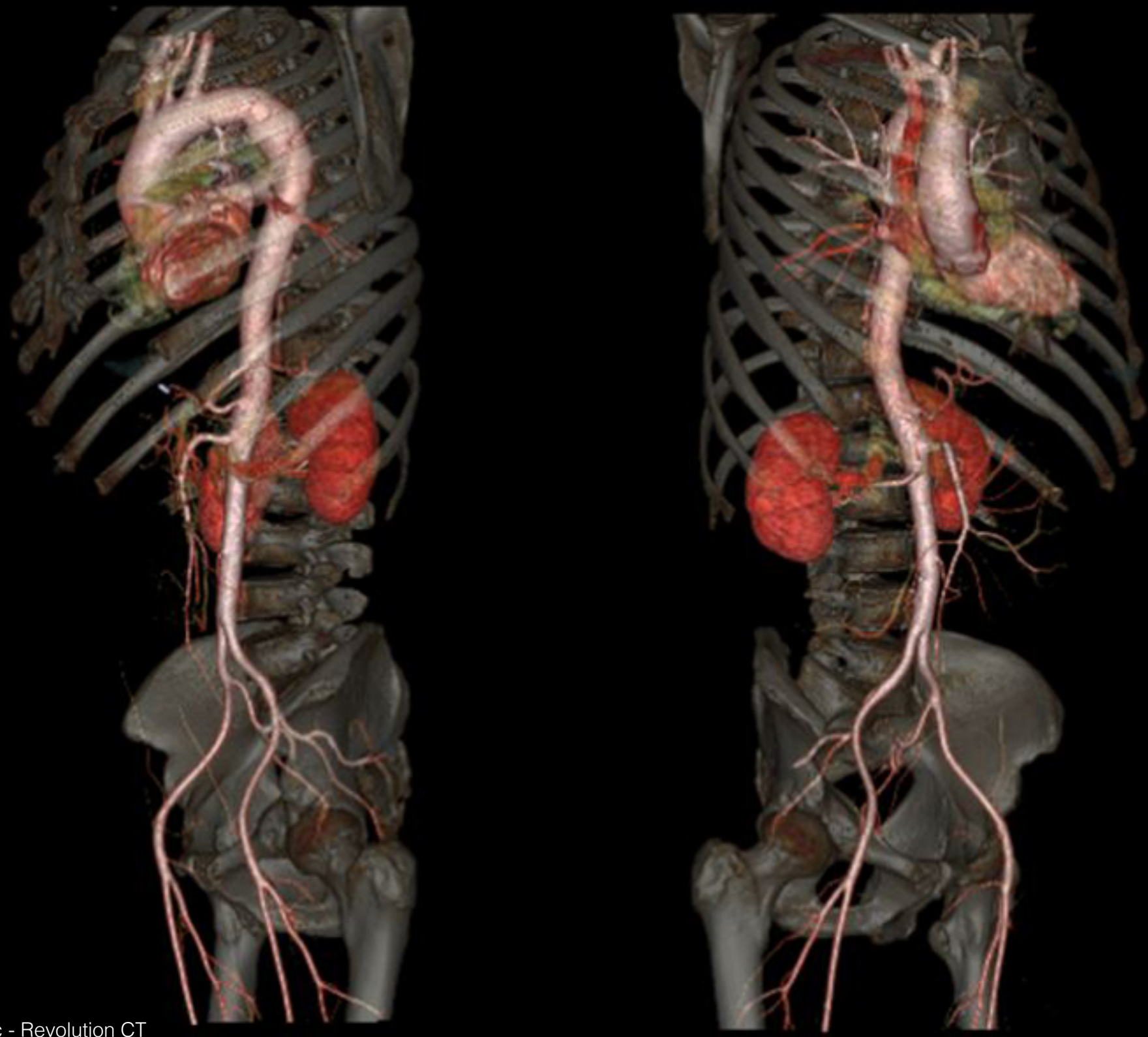


P(Méninges)



Carte de décision

Segmentation … en 3D



Courtesy General Electric - Revolution CT

Recalage

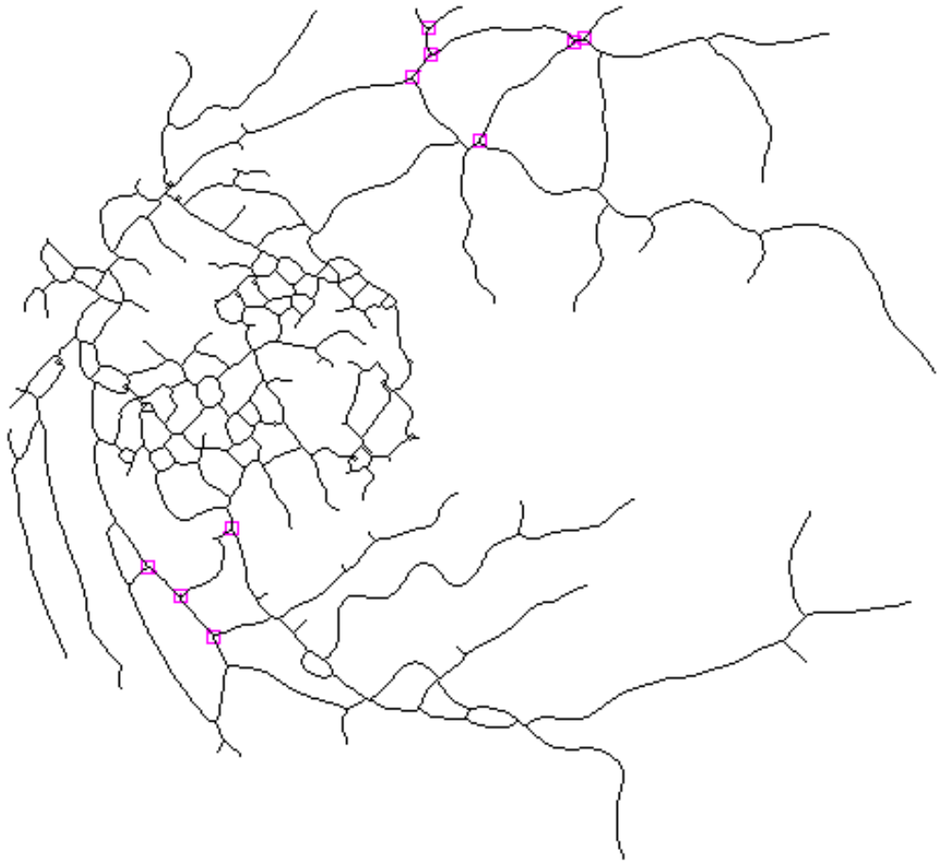
Problème : plusieurs images
acquises dans des géométries différentes

Objectif : fusionner ces images pour
enrichir l’information qu’elles contiennent

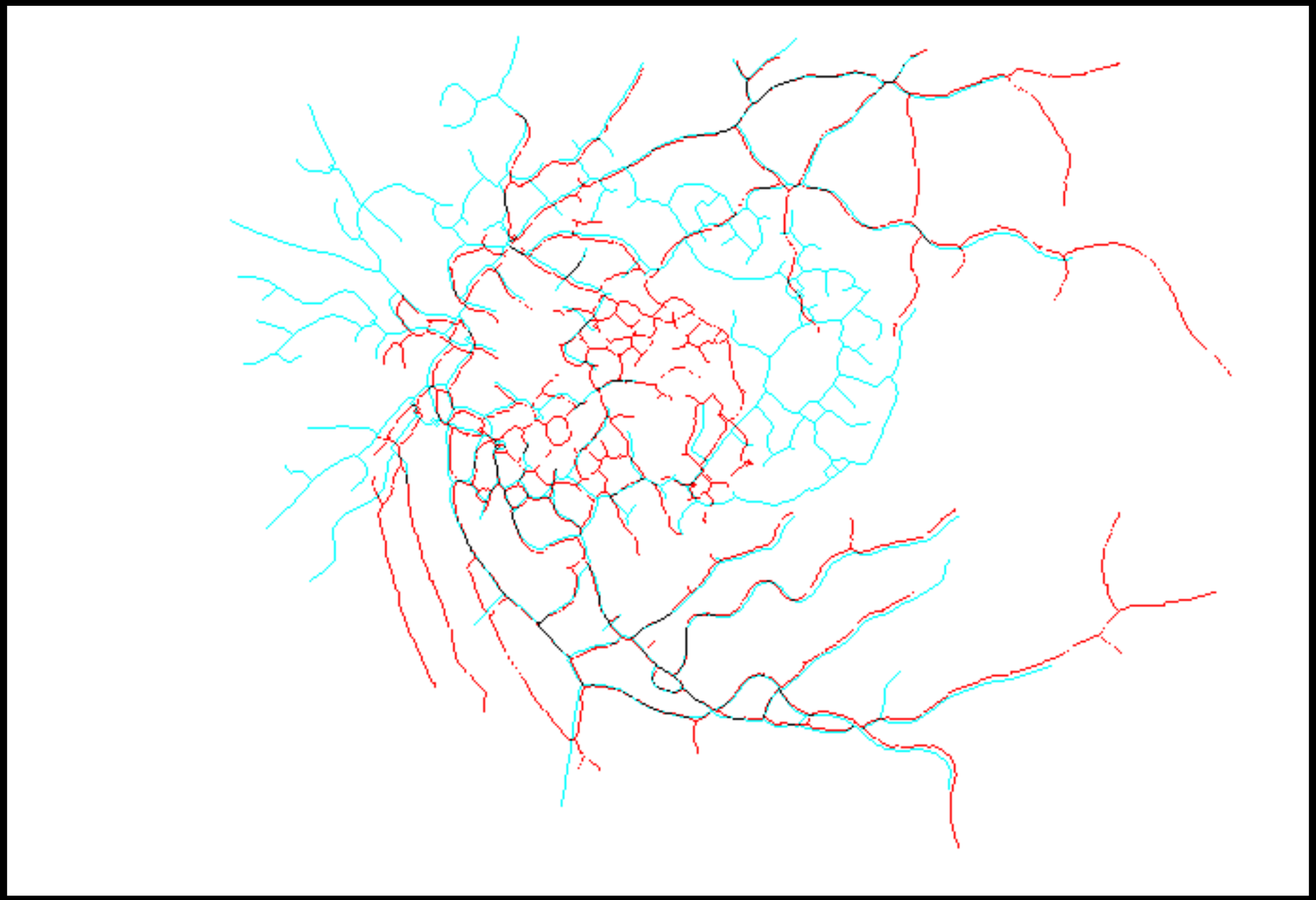
Exemple en ophtalmologie :

angiographie / fond de l’oeil

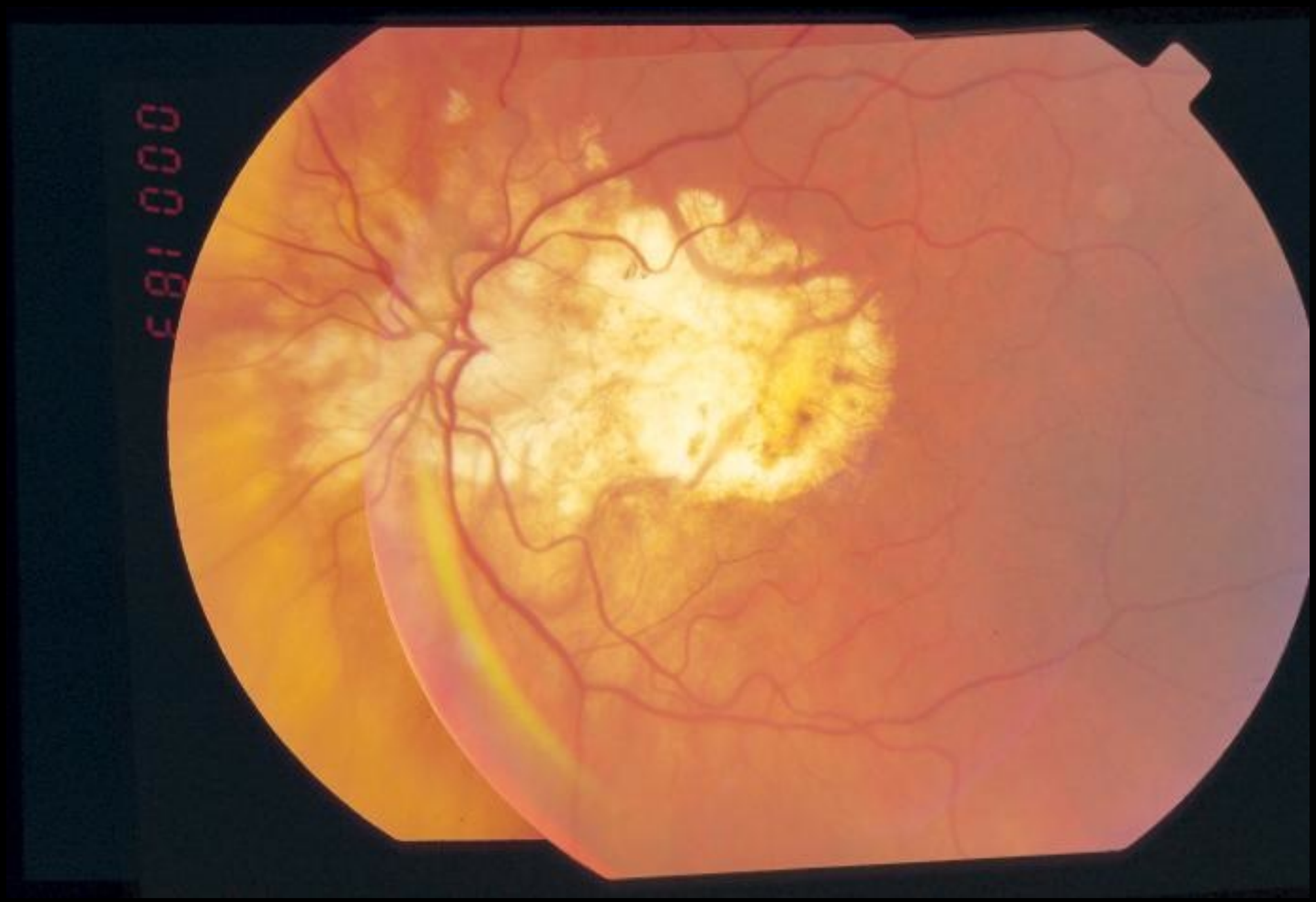
Recalage



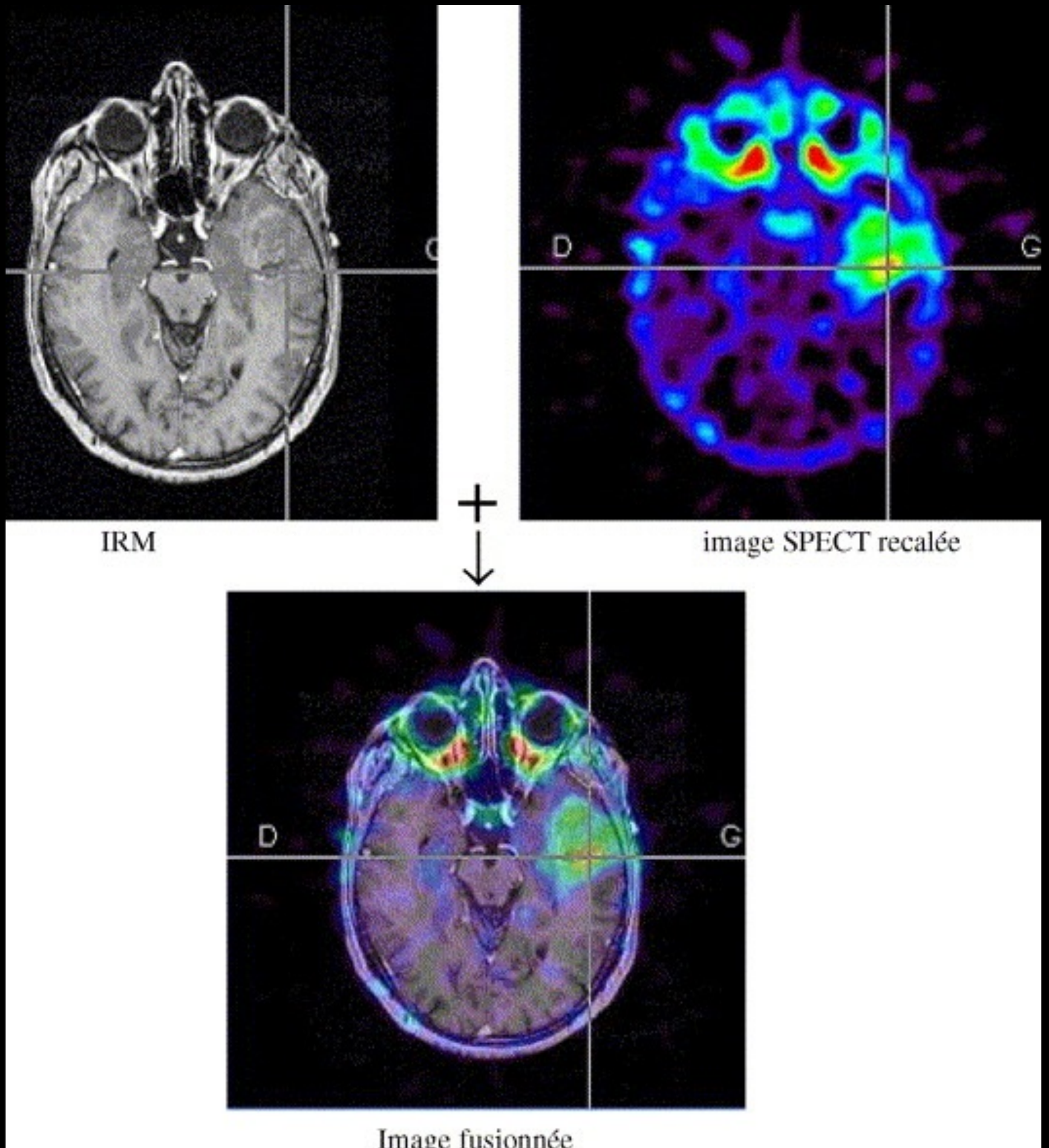
Recalage

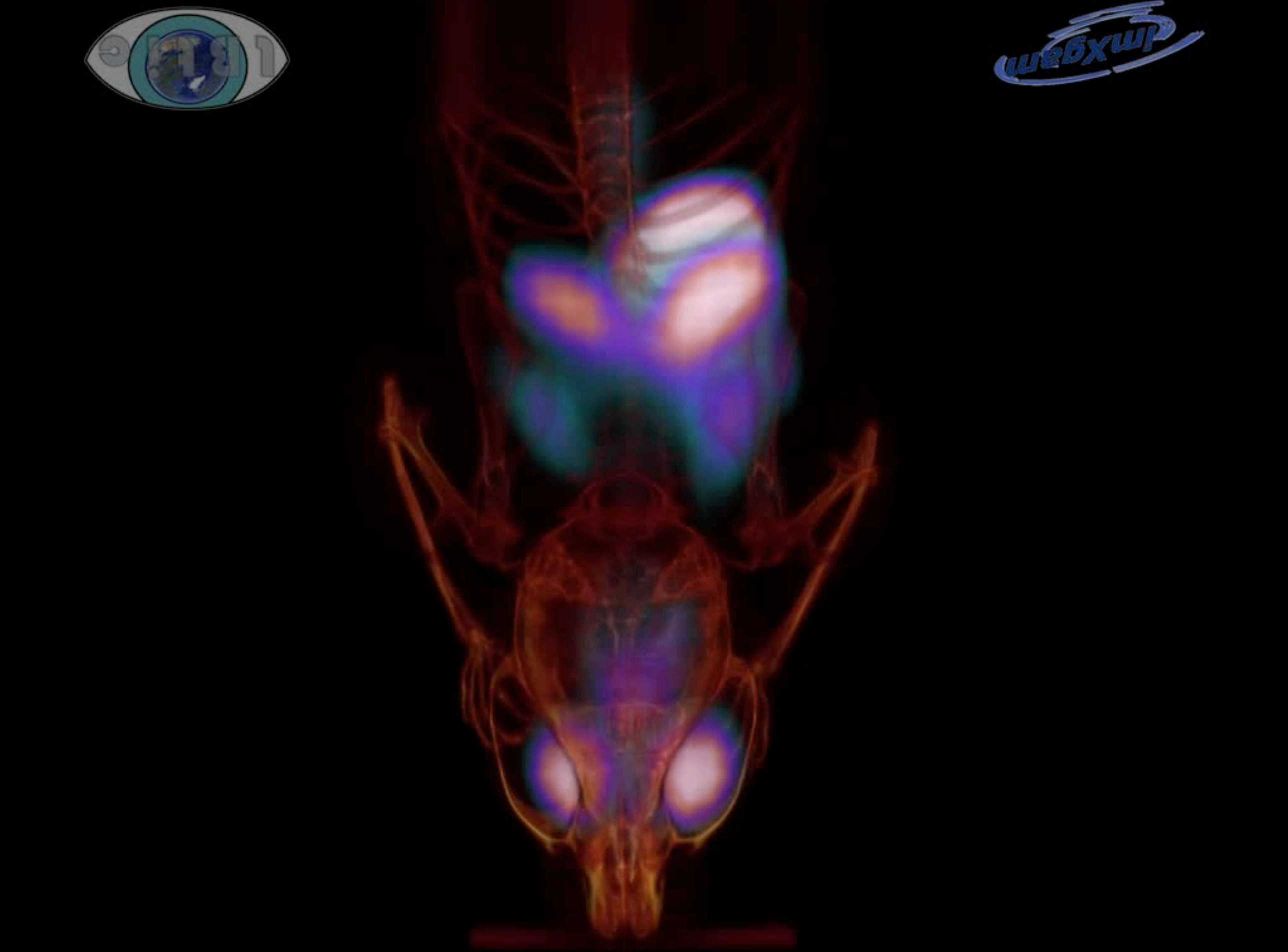


Recalage

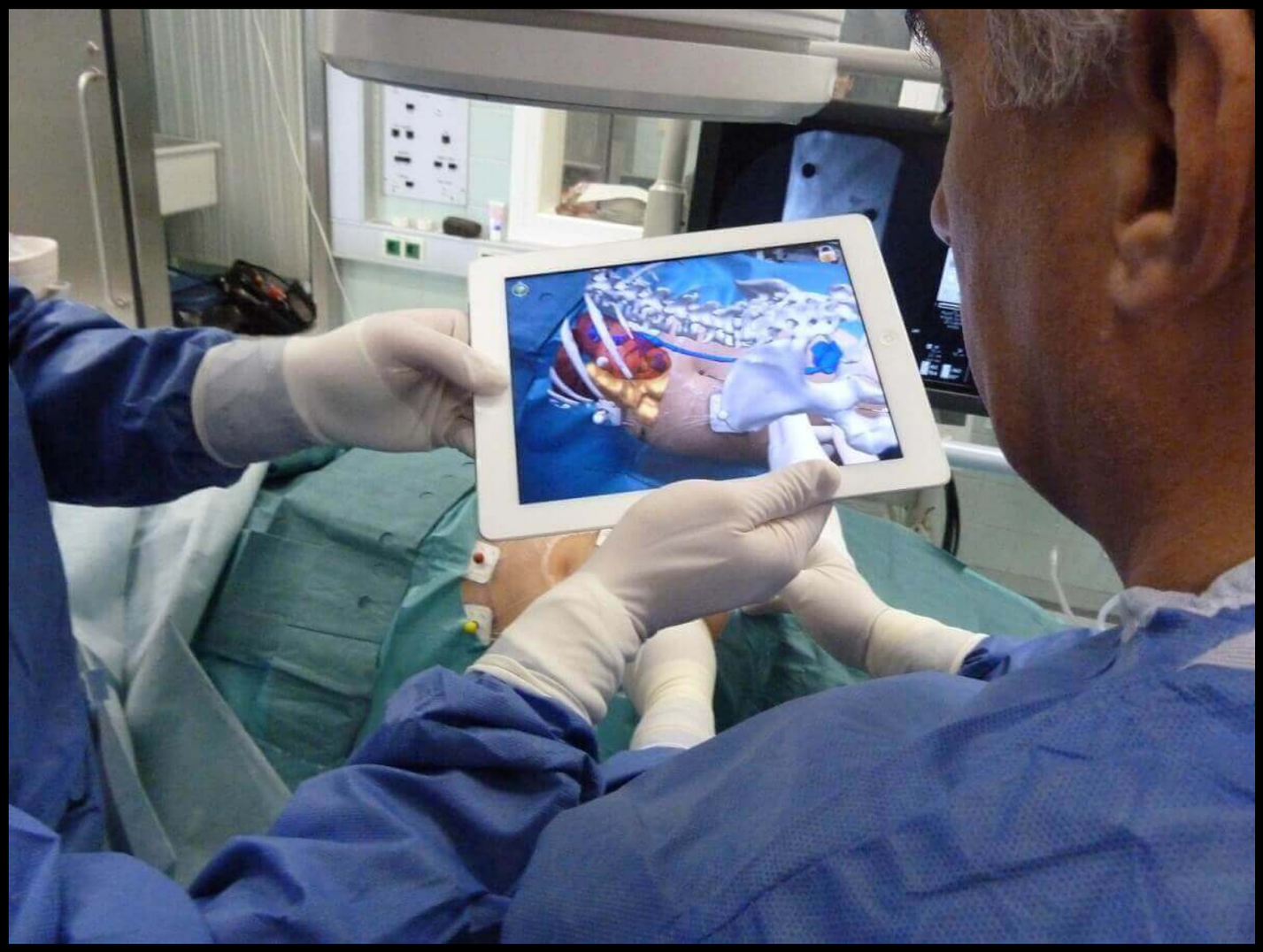


Recalage : IRM + SPECT





Réalité augmentée



Réalité virtuelle