ANALISI DELLE VARIABILITÁ DELLE CARATTERISTICHE DI RETI MICROVASCOLARI 3D

Stato di Avanzamento

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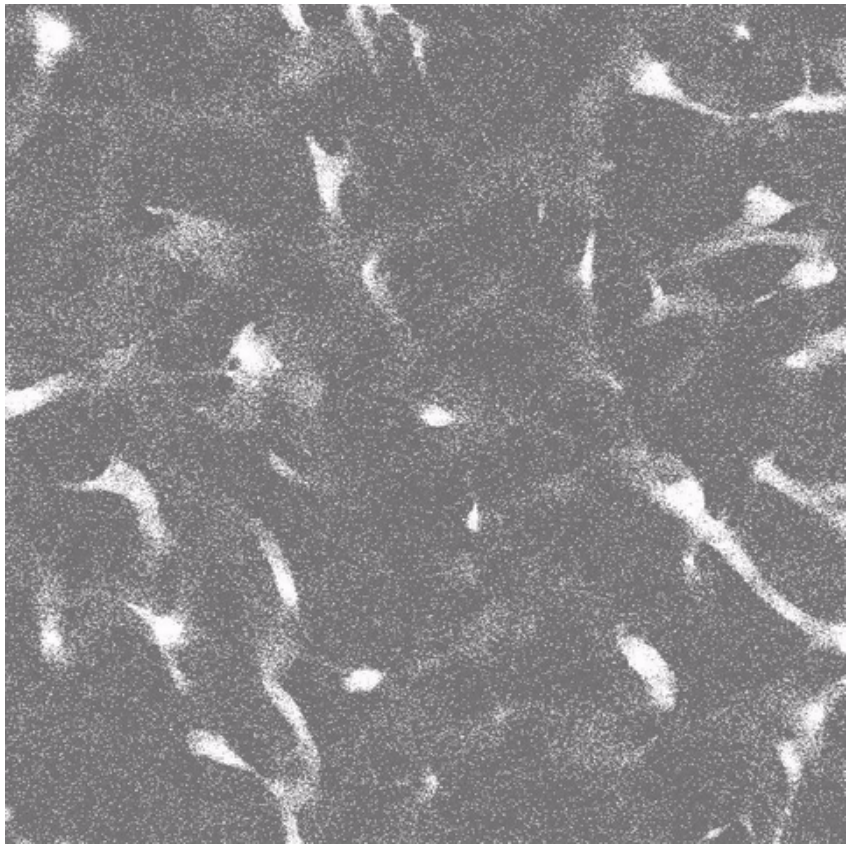
REAVER

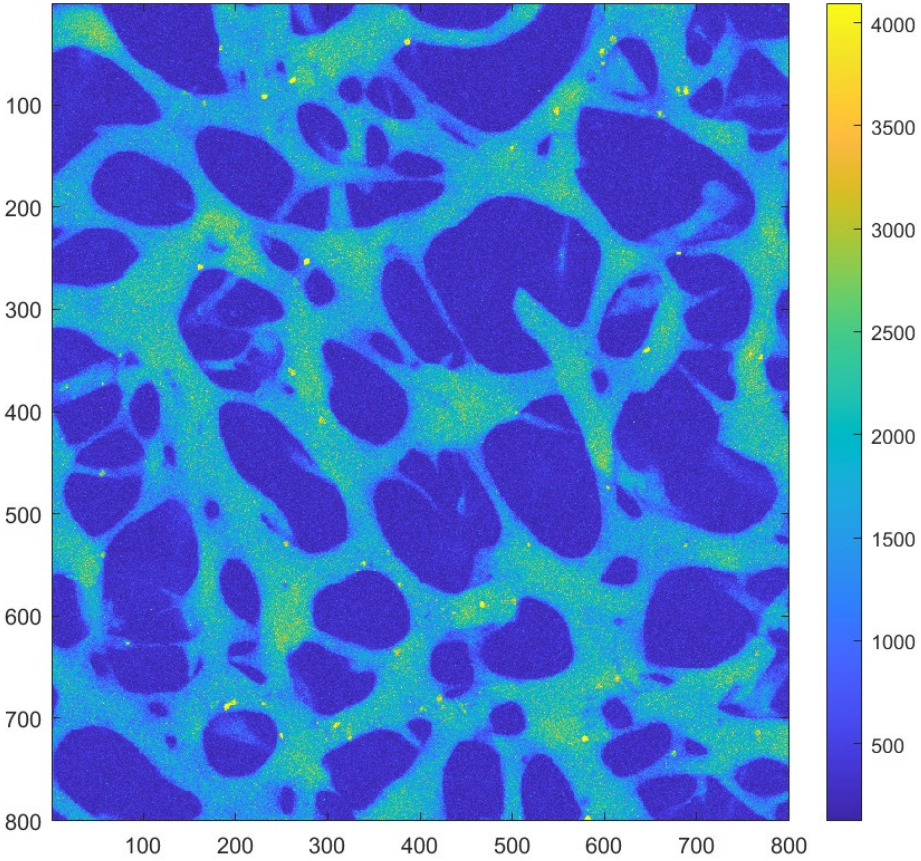
Segmentazione e scheletrizzazione accurata, immagine compatta, risultati coerenti → **2D**

- 800x800x30 (*1272x1272x150 µm)*
- REAVER necessita di immagini 2D, quindi 800x800x1

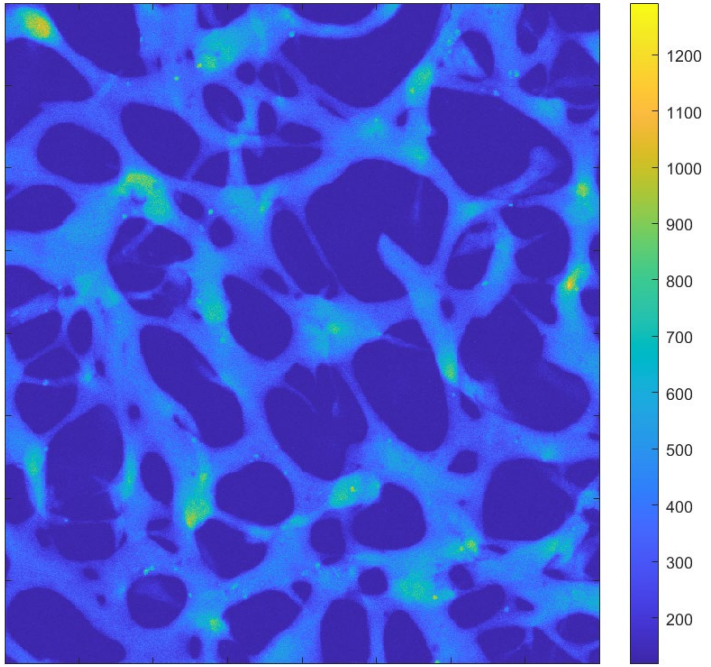
  → Sviluppo di algoritmi di **flattening**



Flattening 2D: Metodo del Massimo



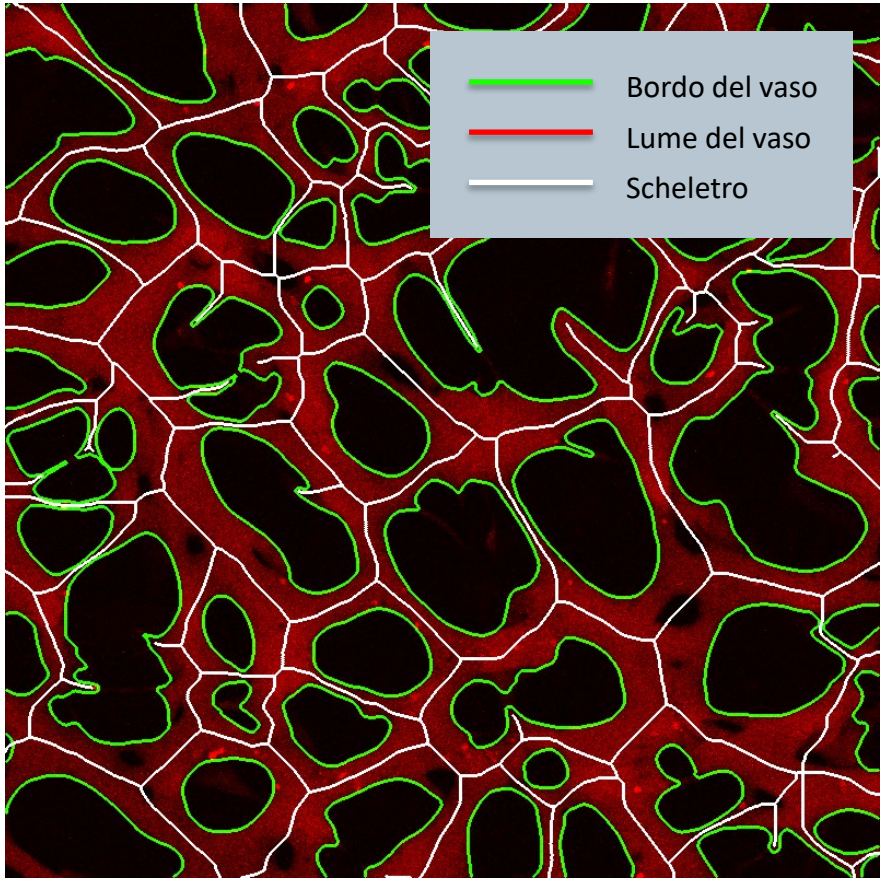
▲ *Metodo del massimo*

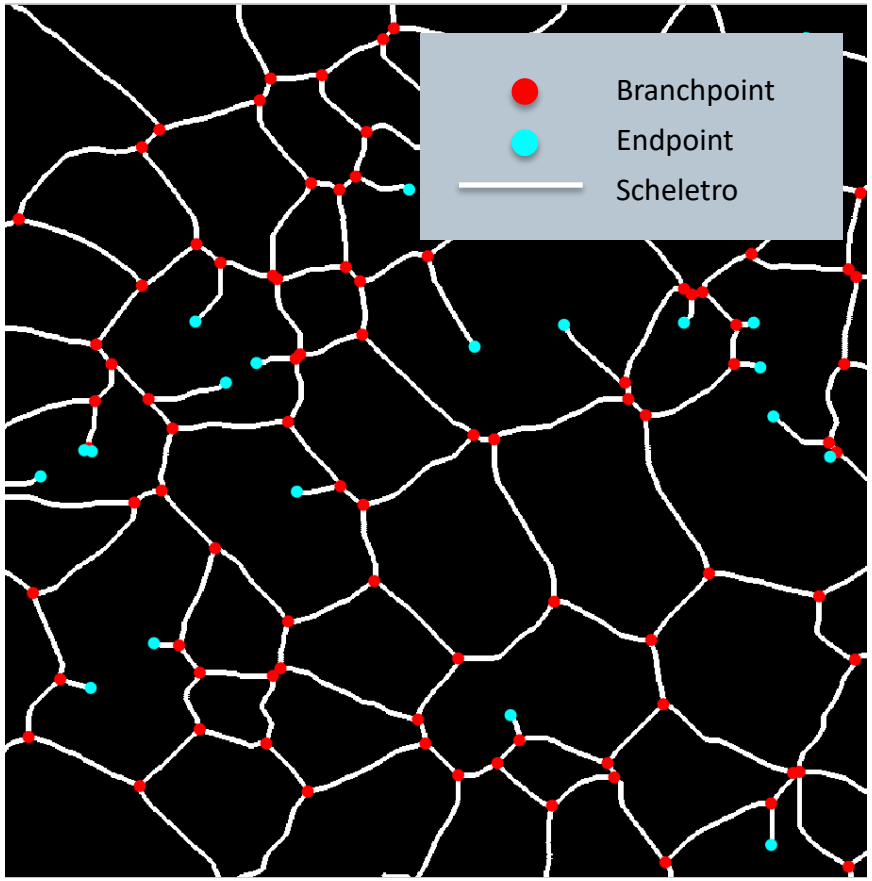


▲ *Metodo della media*

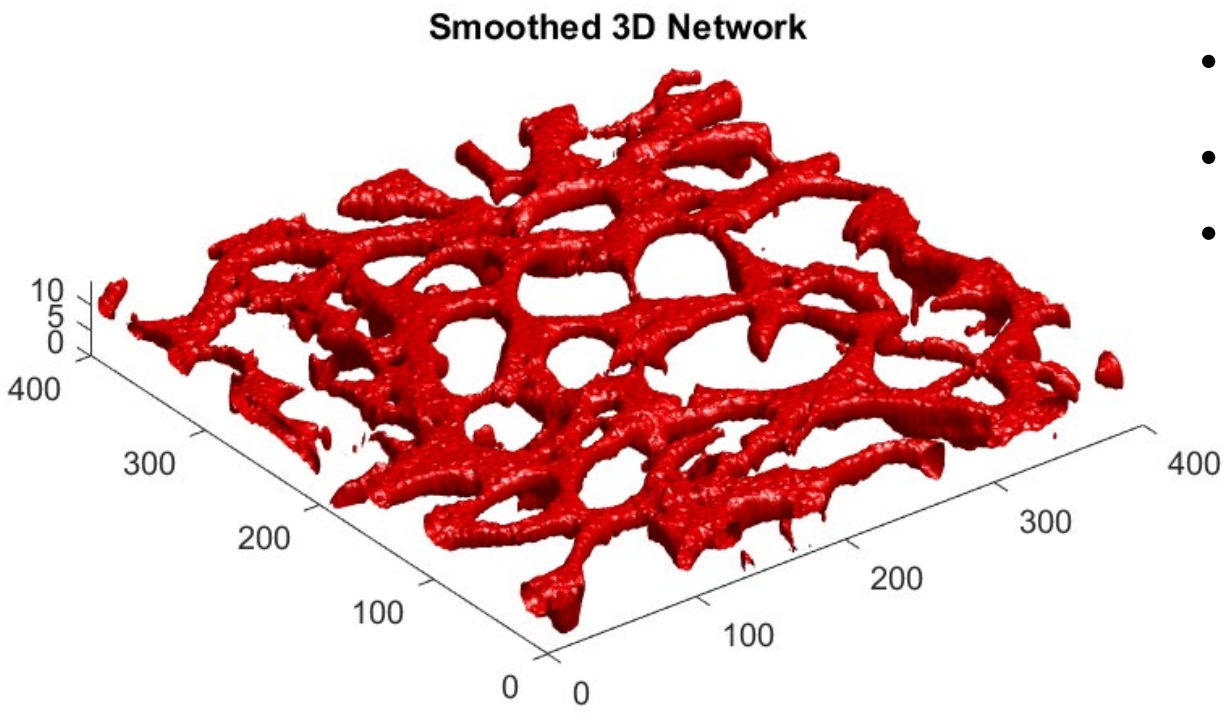
CONSERVATIVO

Analisi Morfologica



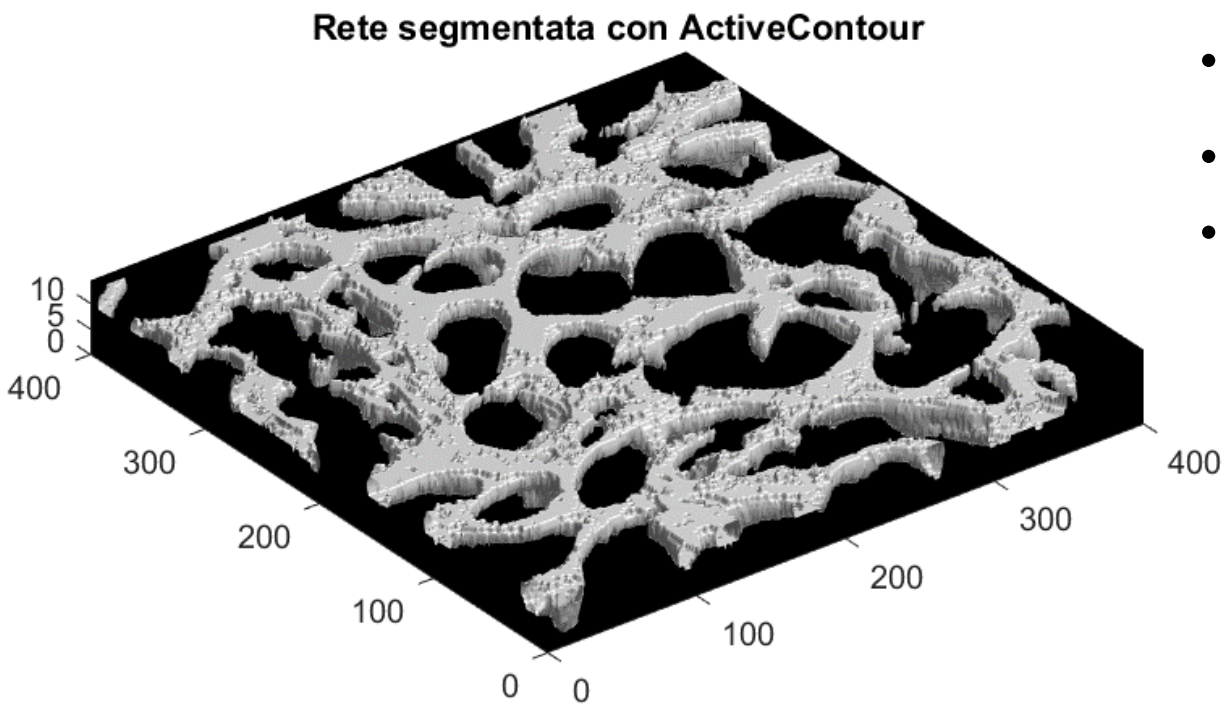


Analisi 3D – Ricostruzione



- **Ricostruzione**
- Segmentazione 3D
- Scheletrizzazione 3D
- Estrazione di branchpoints ed endpoints

Analisi 3D – Segmentazione

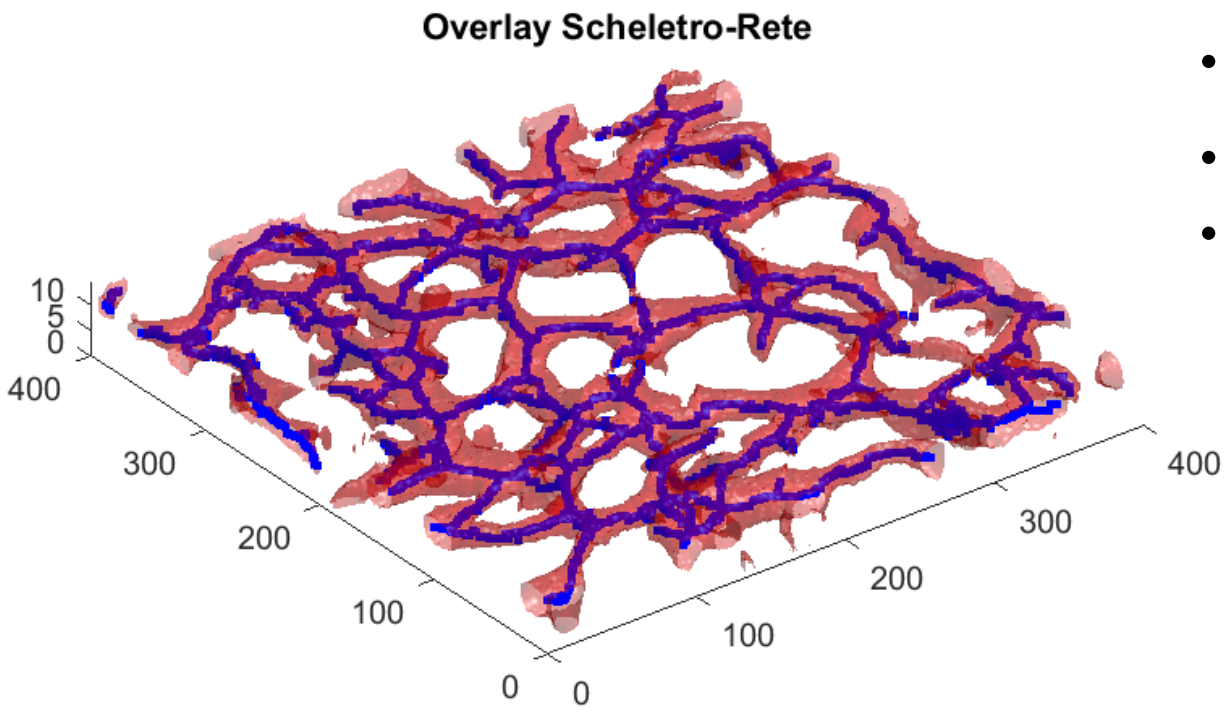


- Ricostruzione
- **Segmentazione 3D**
- Scheletrizzazione 3D
- Estrazione di branchpoints ed endpoints

Vaso

Sfondo

Analisi 3D – Scheletrizzazione

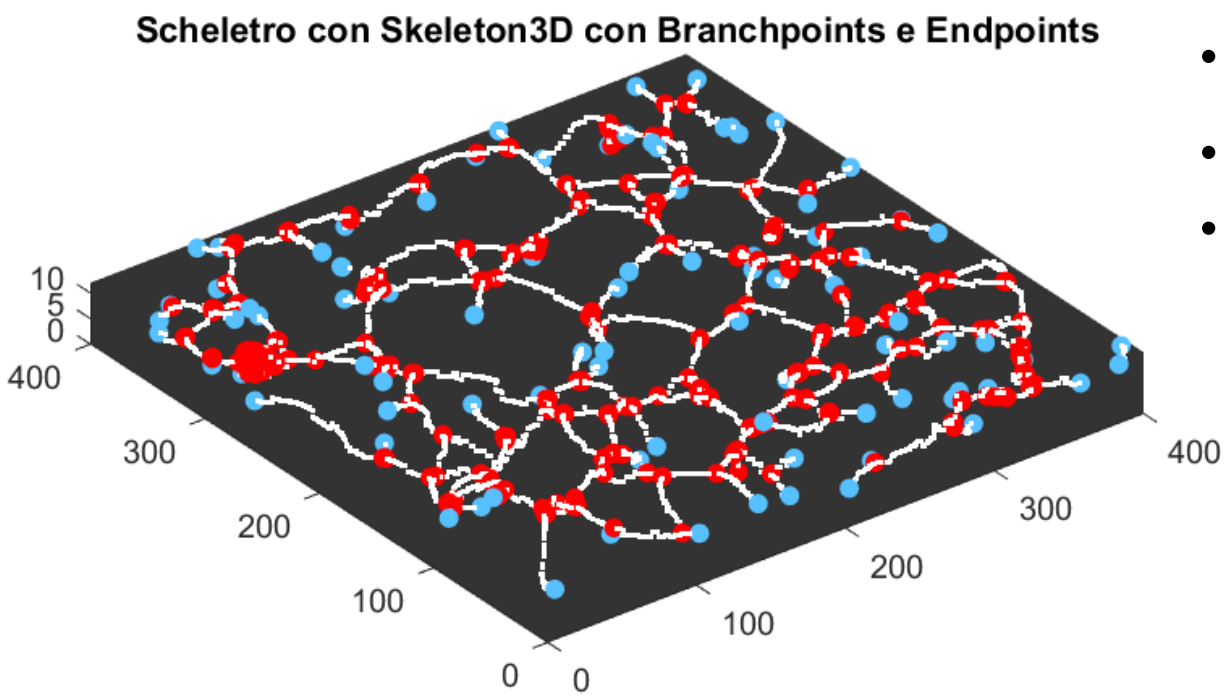


- Ricostruzione
- Segmentazione 3D
- **Scheletrizzazione 3D**
- Estrazione di branchpoints ed endpoints

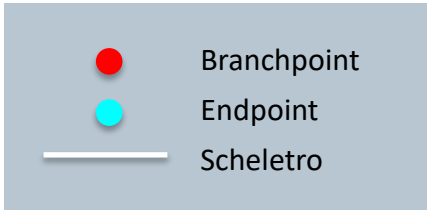
Scheletro

Vaso

Analisi 3D – Branchpoints e endpoints

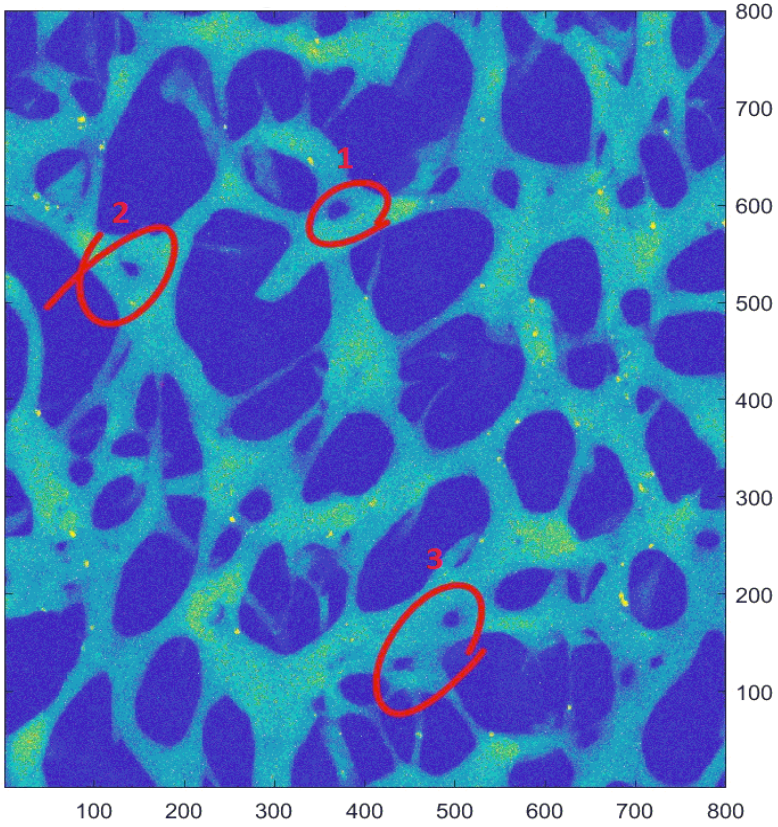


- Ricostruzione
- Segmentazione 3D
- Scheletrizzazione 3D
- **Estrazione di branchpoints ed endpoints**



Conclusioni

Flattening 2D. Metodo del massimo



Confronto REAVER-Skeleton3D