



**MODEL CONFIGURATION**  
Grid: 512×512  
Backend: CUDA (GPU)  
Equation:  $\nabla^2 P = 0$  (Laplace)  
Boundary Conditions:

- $P = 1.0$  (arteries)
- $P = 0.0$  (veins)
- $\nabla P \cdot n = 0$  (Neumann)

Obstacles:

- Two internal ellipses (left/right) with central gap

Growth Prob.:  
 $p_i \propto |\nabla P|^{1.5}$   
Type rule (original):

- New vessel copies type of neighbor with max  $P$

Statistics:  
Iterations: 110027  
Vessels: 110029  
Fraction: 41.97%  
Time: 4567.96s  
Speed: 24 iter/s