

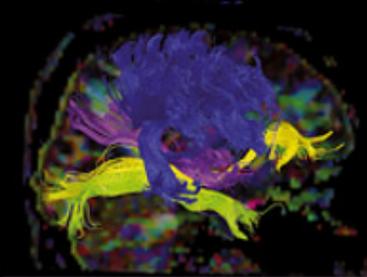
Déploiement virtuel interactif d'un stent à dérivation de flux

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²Université de Lyon - INSA Lyon - CNRS UMR5220 - INSERM U1044 - UCB Lyon 1; CREATIS, Villeurbanne, France

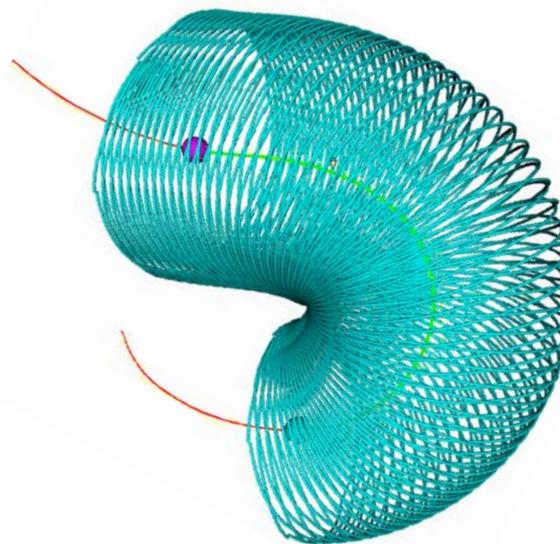
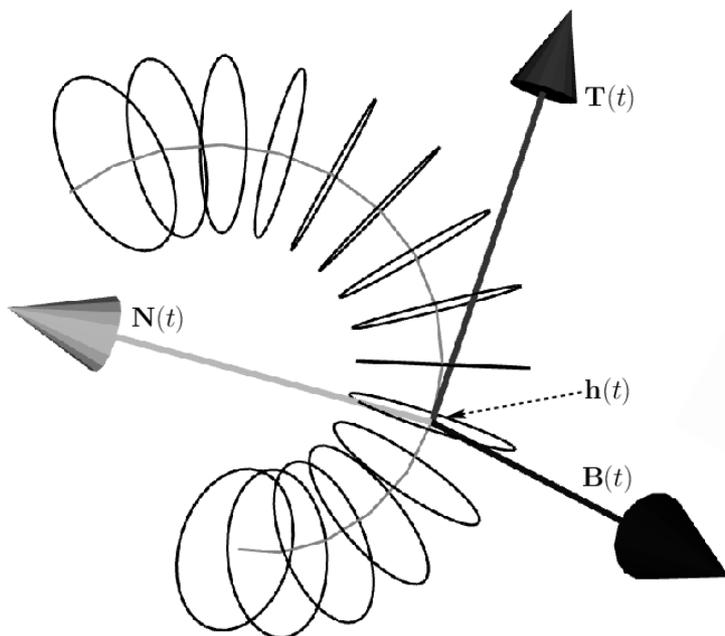
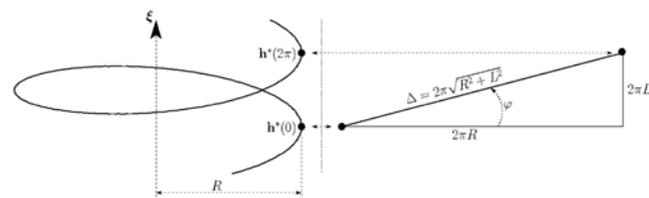


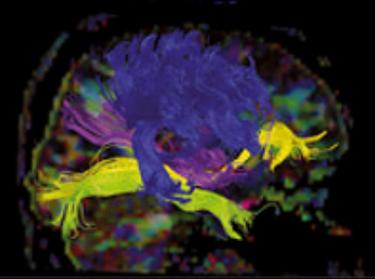


Modélisation de Flow-Diverter

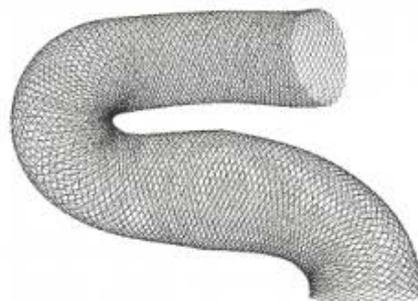
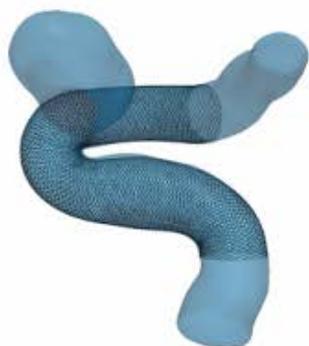
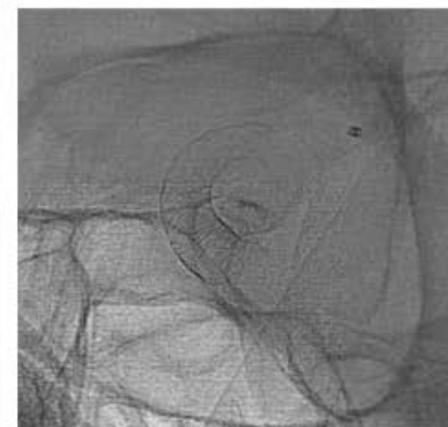
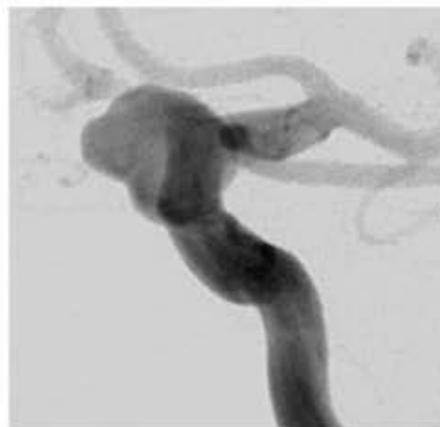
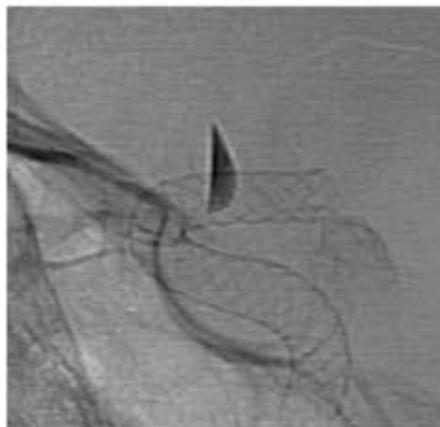
Right Generalized Cylinder state model: RGC-m

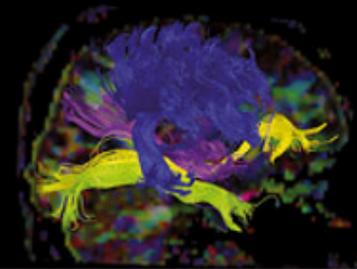
Modèle paramétrique continu d'une surface géométrique étirée.



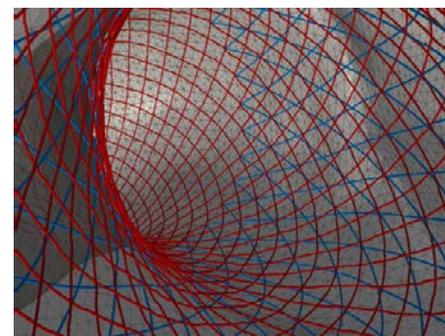
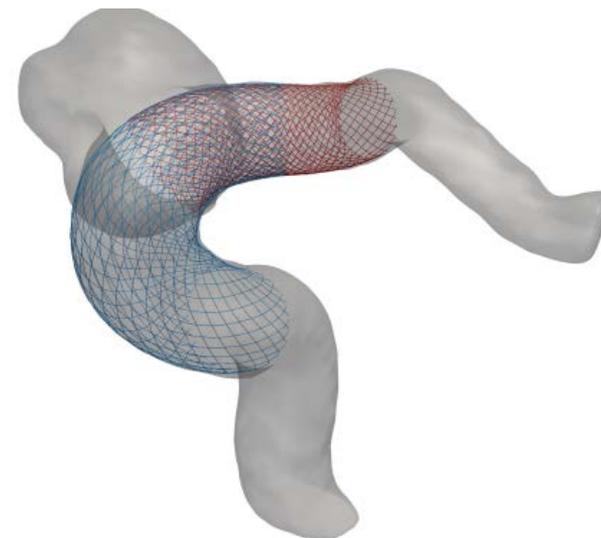
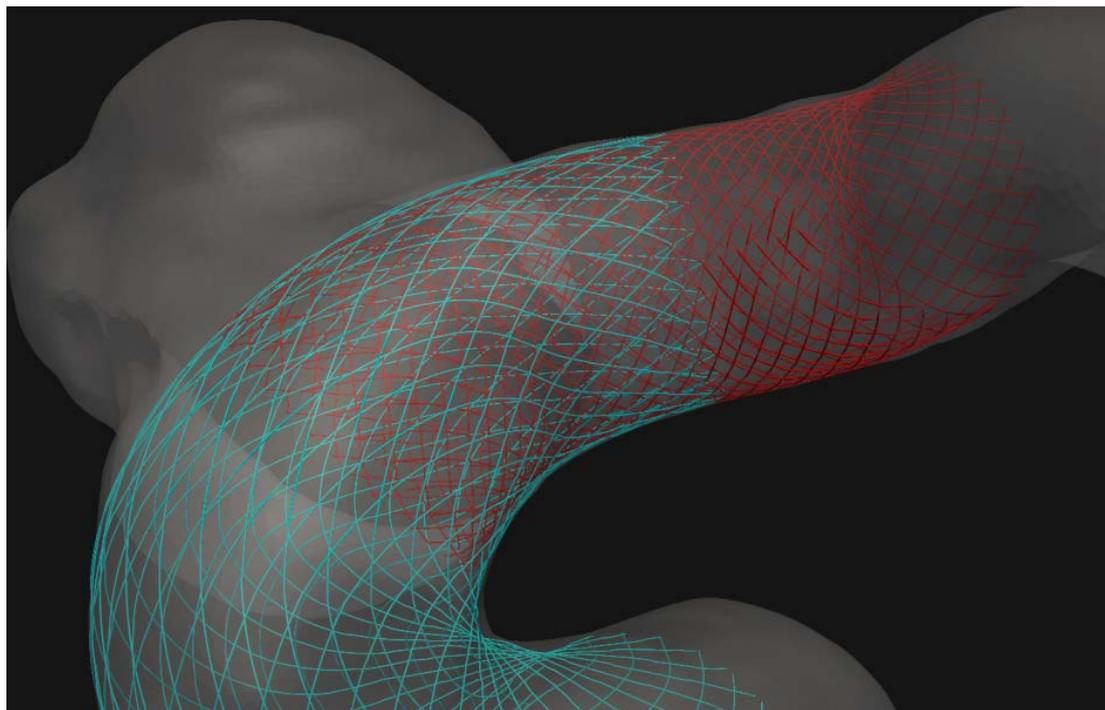


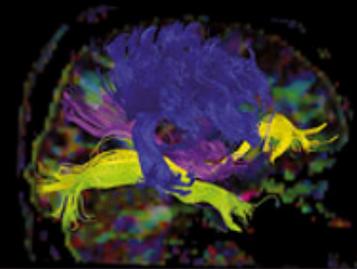
Déploiement virtuel et validation



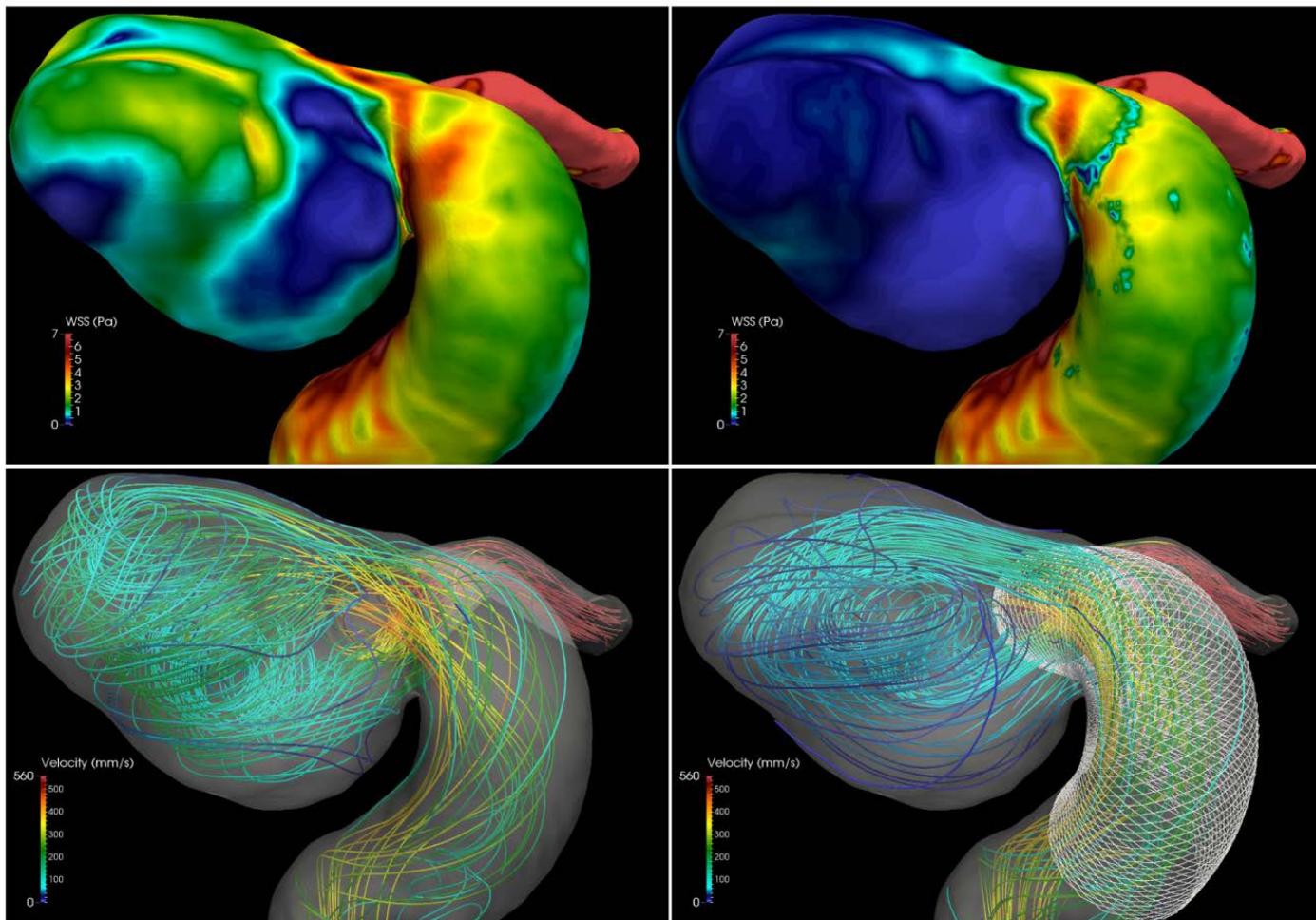


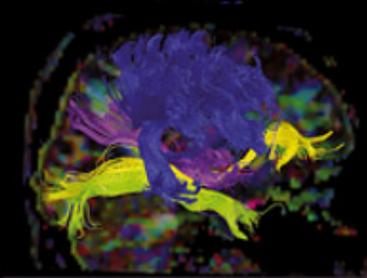
Stents télescopés



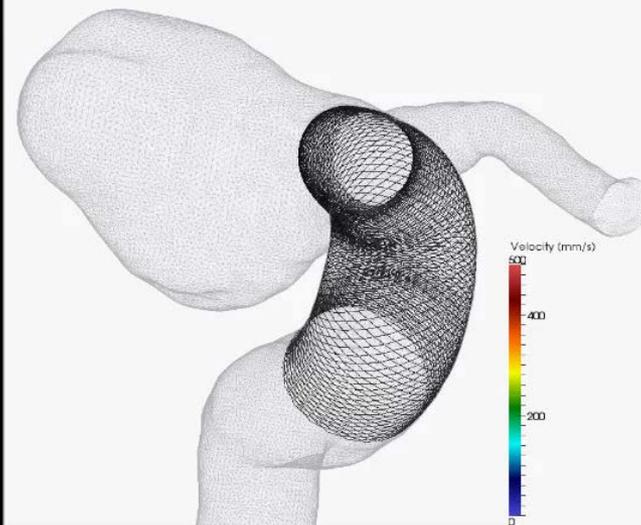
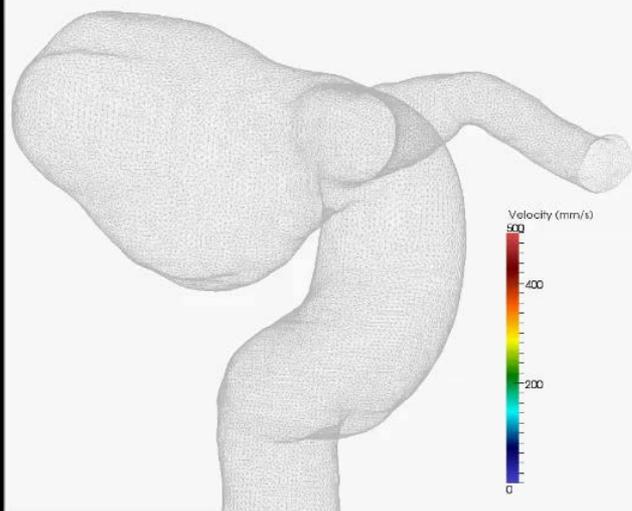


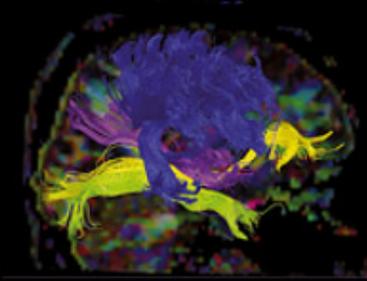
Blood flow simulation





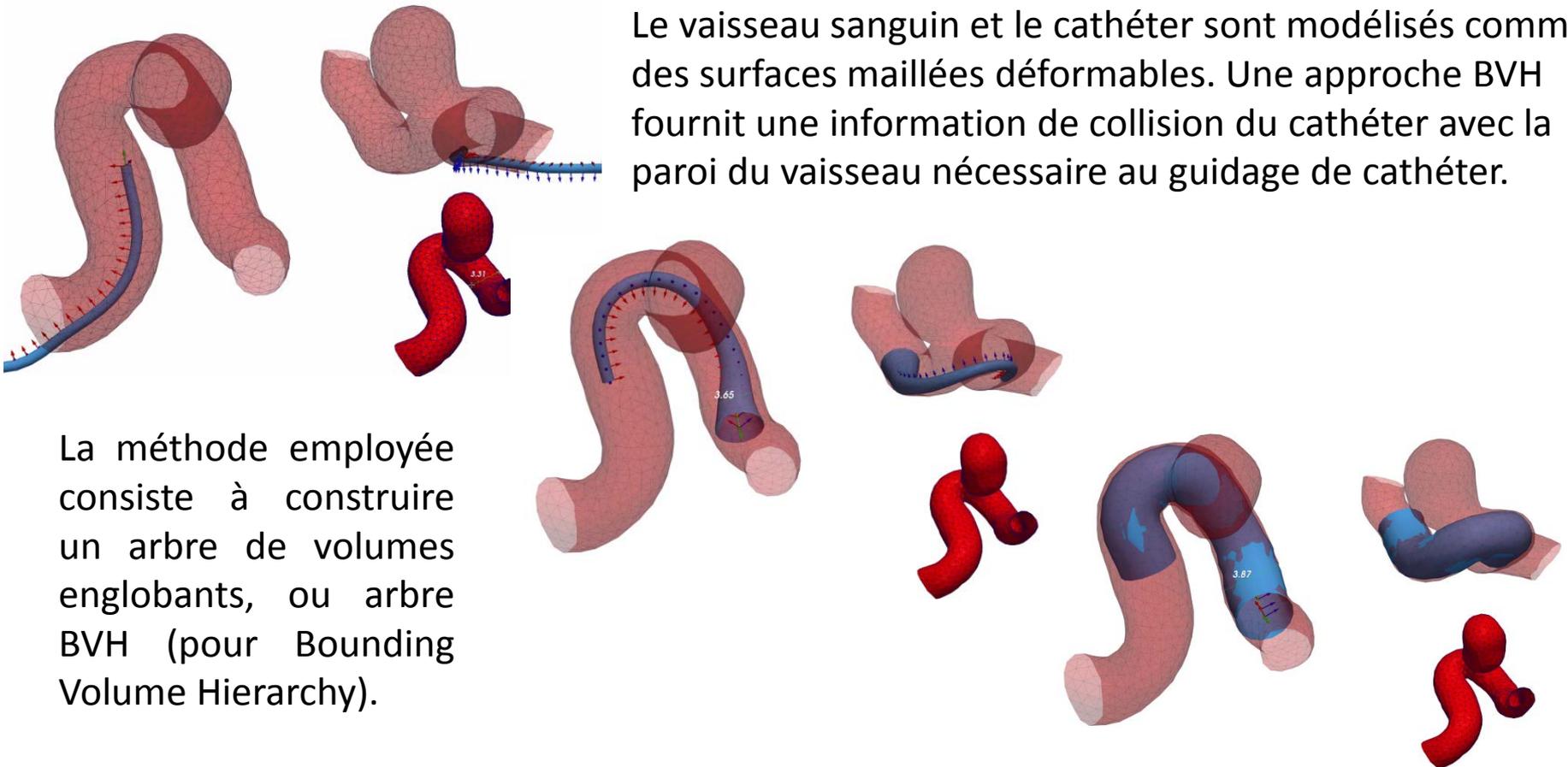
Blood flow simulation



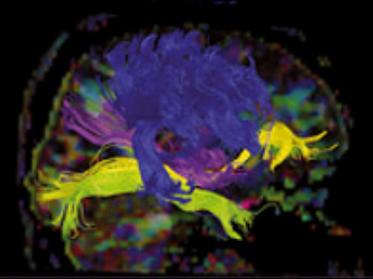


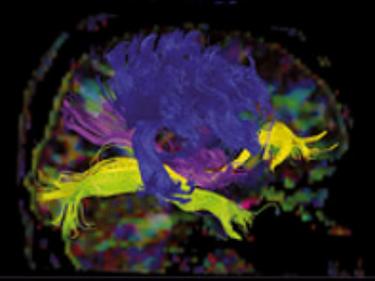
Déploiement virtuel interactif

Le vaisseau sanguin et le cathéter sont modélisés comme des surfaces maillées déformables. Une approche BVH fournit une information de collision du cathéter avec la paroi du vaisseau nécessaire au guidage de cathéter.



La méthode employée consiste à construire un arbre de volumes englobants, ou arbre BVH (pour Bounding Volume Hierarchy).





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