

# **Philips EP navigator**

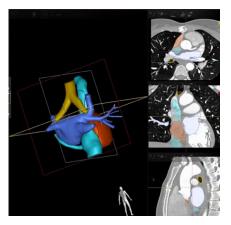
## Intuitive 3D catheter guidance

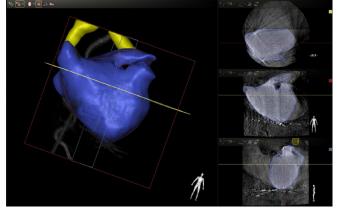
Real-time imaging of cardiac structures is a cornerstone of the electrophysiologist's ability to efficiently and accurately guide a catheter through the anatomy of a beating heart.

However, 2D imaging has obvious limitations when navigating through complex and highly variable 3D anatomical structures. Having access to 3D data fused with realtime 2D imaging has the potential to increase the speed and precision of procedures.

EP navigator facilitates intuitive 3D catheter image guidance during AF ablation procedures and provides a detailed 3D image of anatomy, which can be precisely registered and overlaid onto 2D live fluoroscopy to support complex procedures.

# EP navigator supports navigation based on pre-procedural images such as CT/MR or a 3D rotational scan acquired during the procedure





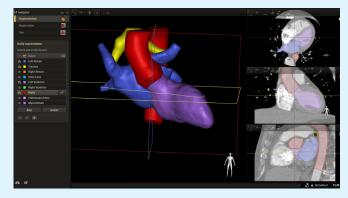
Imported pre-procedural CT or MR

Contrast-enhanced 3D rotational scan

## Optimizing intra-procedure planning with automatic segmentation

Whether left atrium 3D volume is acquired from 3D rotational contrast enhanced scan or imported pre-procedural CT or MR, the 3D volume is automatically segmented to show the left atrium and pulmonary veins.

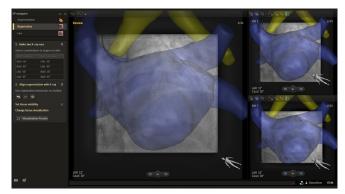
The segmented volume can also be exported to standard mapping systems to manage: dose, mapping time, and the need to re-register data.



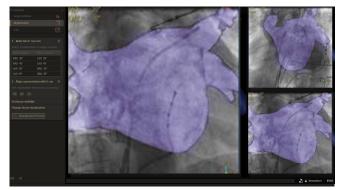
Segmentation of 3D volume acquired from imported pre-procedural CT

## Registration

Easily register the 3D volume with 2D images



Registration based on trachea outline without the need of contrast



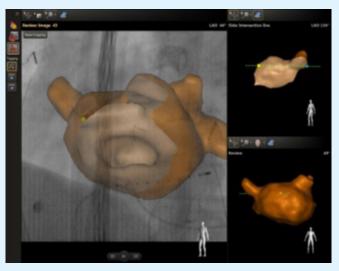
Registration based on a contrast injection or a catheter position

### Live image guidance

During live image guidance, you can view the 3D volume data by different anatomical planes to get an immediate reference point.



The 3D volume can also be displayed with an outline around critical structures to support decision making. The outline gives the overview and orientation while still being able to see the catheter within left atrium.



EndoView allows the electrophysiologist to look inside the 3D structures to view the posterior side of the atrial wall, as well as the ostia of the pulmonary veins, the ridge, and other cardiac features.

#### **Procedural annotation**

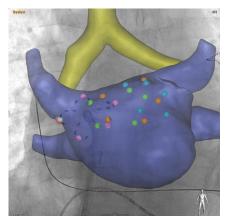
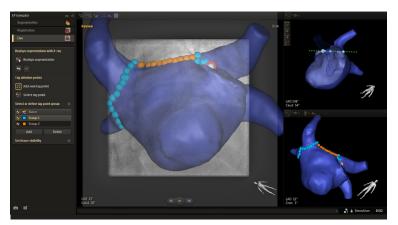


Photo courtesy of Homolka Hospital- Prague



#### **Point tagging**

In combination with the 3D overlay functionality, EP navigator offers point tagging to mark ablation points. The point tagging functionality is compatible with all ablation treatment modalities and can be used in combination with all catheters.

