Huygens Essential now extended with more visualization tools

Scientific Volume Imaging (SVI) always has had expertise in visualization next to its strong focus on deconvolution, developing visualization tools that were part of *Huygens Professional, FluVR* or *FreeSFP*. Since the year 2000 this resulted in adding a set of powerful visualization tools to the *Huygens Essential* basic as well.

In 2005 SVI releases still **more visualization software**. You can download the latest *Huygens Suite* now from our web site at http://www.svi.nl/download and ask for a free of charge test license to see the latest Visualization Tools:

The Twin Slicer: Instant comparison of your restored and original dataset, or of different slices in your image.

The MIP Renderer: Instant spatial Maximum Intensity Projection of your data.

The SFP Renderer: Based on the Simulated Fluorescence Process volume rendering algorithm, it allows you to get a detailed, physically realistic views of your 3D data over time.

The Surface Renderer: (See image on the other side). Introduced as an optional extra visualization tool, it allows you to explore easily the different objects present in your data. Because the Surface Renderer is equipped with fast raytracers, there is *no need for any special graphic card* as would be necessary for conventional polygon based techniques. A total of three graphic pipes is available to visualize your image's data channels: two surface pipes and one MIP pipe, enabling you to mix Surface and MIP together, while controlling transparency and brightness in each graphic pipe independently.



The Twin Slicer



The Maximum Intensity Projection (MIP) Renderer



The Simulated Fluorescence Process (SFP) Renderer

New Colocalization analysis tool

In the second quarter of 2005 the *colocalization analyzer* will be released allowing you to obtain information about the amount of spatial overlap between structures in different data channels and time points. As this overlapping can be defined in many ways, Huygens gives you the colocalization coefficients most commonly used in literature: Pearson, Overlap, and Manders *M* and *K*.

Iso-colocalization object analysis

One of the features of the new *colocalization analyzer* is iso-colocalization *object* analysis. It allows you to quickly



The Surface Renderer

determine the properties of the different colocalization regions in your data. This is realized by visualizing the colorcalization map as iso-colocalization surfaces. In this way regions in which the degree of colocalization exceeds a certain value become objects. By clicking on the objects local colocalization parameters are computed and reported. To relate the iso-colocalization objects to the original data the surface objects can be blended with a MIP projection of the data.



Colocalization analysis

When you would like to stay informed on our latest developments, simply send an email to sales@svi.nl with the subject: 'Announcements'.

Images: isolated Rat Hepatocyte couplet recorded at the Department of Anatomy, University of Basel, Switzerland (head: Prof. Lukas Landmann), as deconvolved with Huygens.

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