

sCMOS ENHANCED LEICA SR GSD 3D

Turbo charge your discoveries with high-speed dSTORM microscopy

The Leica SR GSD 3D (dSTORM) system has been further enhanced by the addition of scientific CMOS camera technology. The pco.edge 4.2 sCMOS camera now enables the system to achieve frame rates of over 1000 fps offering the following advantages:

- Improved event detection for better image quality
- Enables live cell localization microscopy
- Large high-speed field of view
- Shorter imaging times – increased system throughput
- Reduced drift improving image resolution

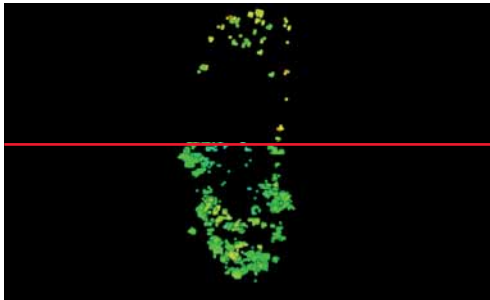
1: Living cell: Keratin-YFP

2: Immunofluorescence: Keratin and Plectin

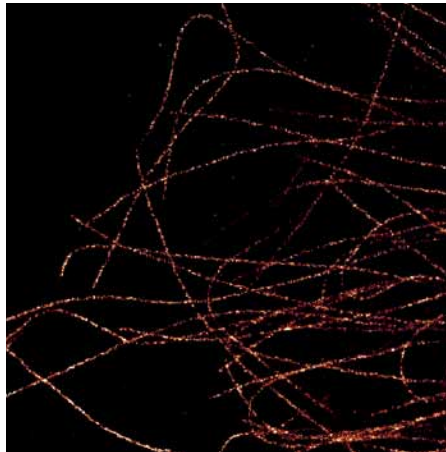
Image courtesies of K. Jalink and L. Nahidi Azar,
NKI Amsterdam, Netherlands

HIGH SPEED 3D dSTORM MICROSCOPY

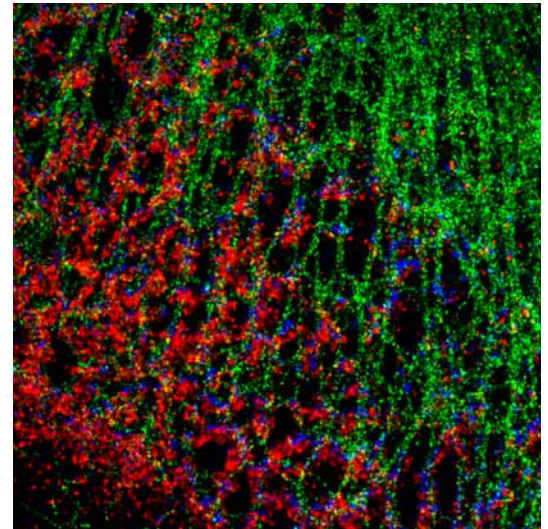
Leica Microsystems proudly announces the launch of our new sCMOS camera for GSD. The addition of an sCMOS camera dramatically enhances the performance of the award winning single molecule localization system. With almost 10 fold faster acquisition times, and unparalleled stability, super-resolution has never been so easy. Using this high-speed camera technology, the Leica SR GSD's high power lasers can hugely accelerate fluorophore blinking rates to enable multi-color 3D dSTORM imaging at over 1000 frames per second. The ability of sCMOS cameras to capture more localization data in less time can significantly reduce drift, and improve your image quality. In addition high Speed sCMOS technology now enables live cell localization microscopy with fluorescent proteins.



3D super-resolution image: cross section through single mitochondria captured in 60 sec.
Top: EMCCD camera
Bottom: sCMOS camera



Fast: Super-resolution image of microtubules acquired in only 5 sec.



Multi color: Three color GSD super-resolution image of Plectin, β -4-Integrin and Keratin. Image courtesy of K. Jalink and L. Nahidi Azar, NKI Amsterdam, Netherlands. Acquired on an sCMOS enhanced Leica SR GSD 3D system

PURCHASE A NEW SYSTEM, OR UPGRADE YOUR EXISTING LEICA SR GSD

Talk to your Leica Microsystems representative to discover more about Leica Microsystem's range of Super-resolution technologies or visit our website at: <http://www.leica-microsystems.com/products/super-resolution-microscopes>

Leica Science Lab is our knowledge portal, designed to support our customers, from those just starting out in their work, to those who are experienced scientists. Featuring interactive tutorials and notes on super resolution.
<http://www.leica-microsystems.com/science-lab>