

### New X-ray LAUE camera

#### **Laue Microdiffraction imaging at the ESRF**

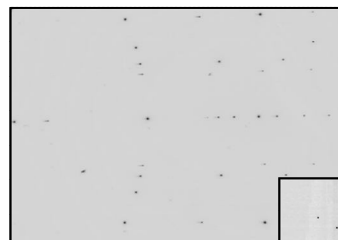
**Photonic Science delivers a new generation of detectors for synchrotrons wishing to carry out systematic bulk and micro crystal orientation.**

The cameras allows unique back scattered geometry with collection time varying from near real time to a few minutes, depending on source, detector and crystal combination. Automated sample rotation, combined with shutterless acquisition brings simpler and more flexible data collection routines.

The acquisition software delivers ready to be indexed digital images. Useful on line tools such as angle, intensity and profile measurements are available from either a Labtop or desktop computer.

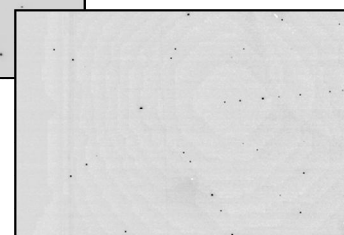
Indexation of Laue patterns can be performed off line using dedicated software packages.

Laue systems can be upgraded with turnkey solution integrating a complete beam delivery to detector setup. Very high resolution options allowing strain analysis studies are available on demand.



Laue microdiffraction  
CuSi, 30 sec exposure  
2 $\mu$  beam size

Laue microdiffraction  
Ge, 30 sec exposure  
2 $\mu$  beam size



**Images courtesy X.Biquard, CEA/CNRS,  
BM32 @ ESRF**

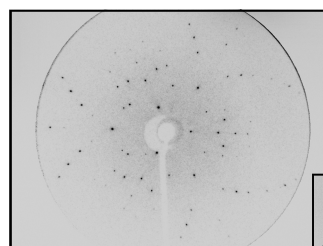
#### **Laue Microdiffraction imaging at CSIRO**

**Photonic Science delivers a new generation of complete X-ray Laue system for homelab source wishing to carry out systematic bulk and micro crystal orientation.**

Photonic Science provides Digital Laue X-ray systems for homelab microcrystal characterisation as well as routine crystal orientation.

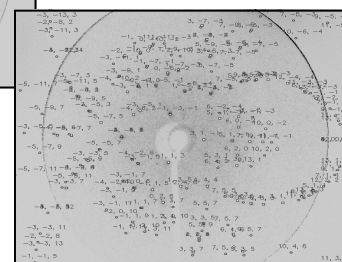
The Microdiffraction system consist of a microfocus source combined with specially designed X-ray optics which deliver a narrow beam down to 10 micron spot size, a large area detector with near single photon counting sensitivity in a back scattered geometry, XYZ and goniometer stage, indexing software.

The standard Crystal orientationLaue upgrade consist of a digital back scattered geometry camera which delivers comparable sensitivity to that of high sensitivity Polaroid films. It can be combined with an existing point focus source or higher brilliance microfocus



Laue microdiffraction  
Si, 30 sec exposure  
10 $\mu$  beam size

Indexed pattern  
Si, 30 sec exposure  
10 $\mu$  beam size



**Images courtesy P.Lynch, CSIRO,**

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