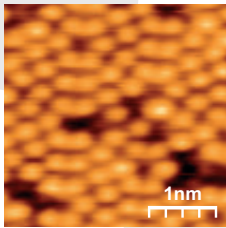
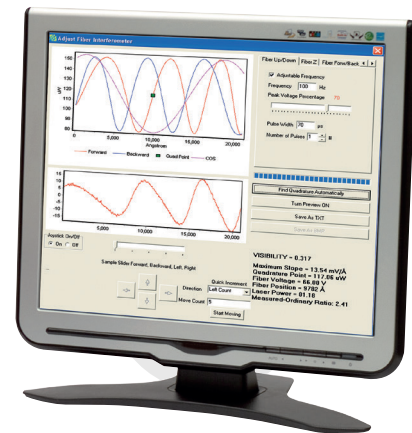


# USB Fibre Interferometer

## Complete Fibre Interferometer System for Atomic Force Microscopes



AFM Image of Si (111) (7x7) Surface,  
Image Courtesy of Dr. Özgür Özer & Prof. J. B. Pethica  
TCD, IRELAND



### System Specification

#### Laser

Wavelength : 1310 nm

Noise Level :  $\sim 10\text{fm}/\sqrt{\text{Hz}}$ , @ 2mW typical

Optical Out Power : 20 $\mu\text{W}$  - 2mW adjustable in 100 steps  
or 2 $\mu\text{W}$  - 200 $\mu\text{W}$  , adjustable in 100 steps  
or 200nW - 20 $\mu\text{W}$  , adjustable in 100 steps

RF Modulation : Modulation frequency & Amplitude are controlled from software for noise reduction

Photodiode Module : Signal & Reference InGaAs Photodiodes

Photodiode Gain Control : x 1, x2, x4, x8

Off-Set DAC Resolution : 16Bit

Spare DAC Range : 10 V

Power Requirement : 240/220/110/100 VAC selectable, 50/60 Hz 100 VA

Physical Dimensions :  $\sim 250 \times 350 \times 100$  mm

PC Connection : USB 2.0 High Speed, 480 Mbps

Environment : Maximum operating temperature of 30°C maximum 30% relative humidity

\*Software upgrades are free for lifetime

\*\*Specifications are subject to change without notice.