

# BL11 PLANET High-Pressure Neutron Diffractometer

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## ■ Optics

BL11 : Decoupled Moderator  
L mod-sample : 25m  
L sample-det : c.a 1.5m

## ■ Detectors

Diffraction :  $^3\text{He}$  PSD (Horizontal :  $2\theta = 90 \pm 11.3^\circ$  )  
(Vertical :  $\chi = 0 \pm 34.6^\circ$  )  
Imaging : Neutron color image intensifier + CCD

## ■ Main High Pressure Devices

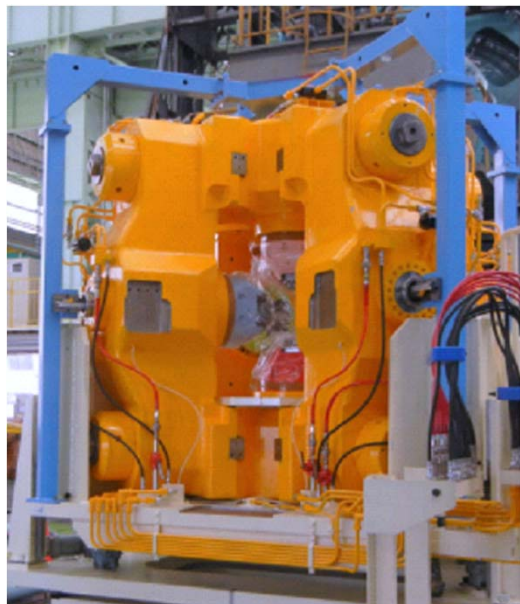
6axis Multi-Anvil Press, ATSUHIME (Max. Load 500tonf/axis)  
Paris Edinburg Press VX4 (Max. Load 200tonf)

## ■ Accessible Pressure & Temperature Range

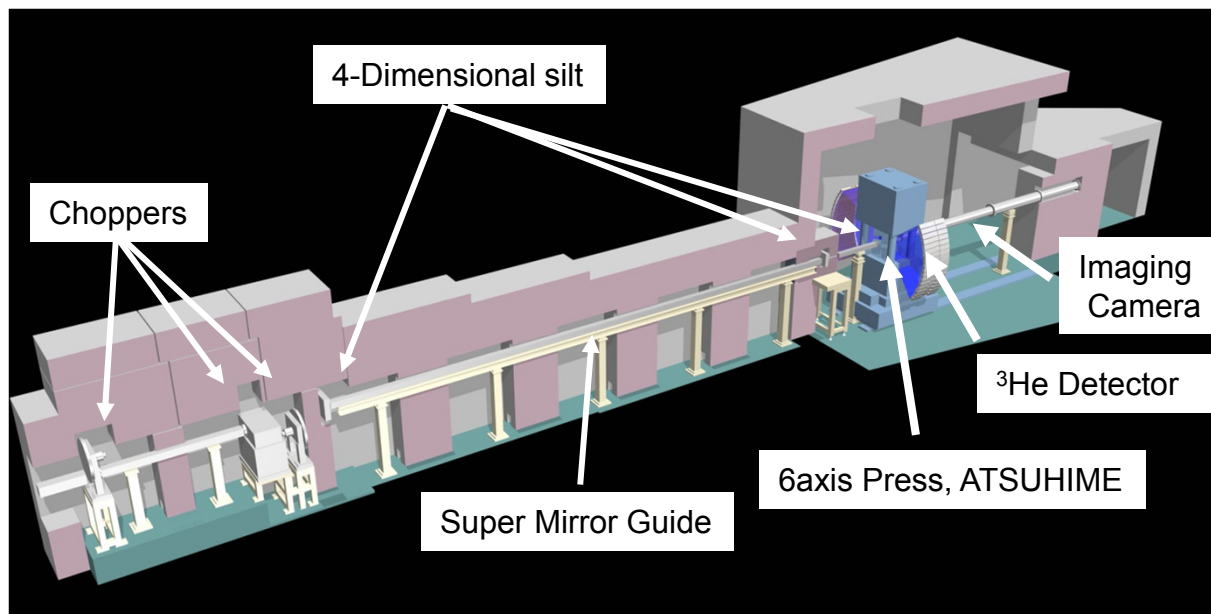
P~20GPa, T~2000°C(ATSUHIME)  
P~20GPa, T~RT (Paris Edinburg Press)

## ■ Resolution & Accessible d-range

Resolution :  $\Delta d/d \sim (0.4\sim)0.6\%$   
d-range : 0.2 – 4.1 Å at single frame  
0.2 – 8.2 Å at double frame



6axis press, ATSUHIME (Max.Load 500tonf/axis)



Cutaway view of the PLANET