Orion: Target diagnostic

X-ray Film Spectrometers

The Orion laser facility at AWE Aldermaston, one of the largest scientific capital investments in the UK, houses a large neodymium glass laser system and a target chamber in which the high energy density physics experiments are performed. This is necessary to support certification of performance and safety of the UK deterrent.

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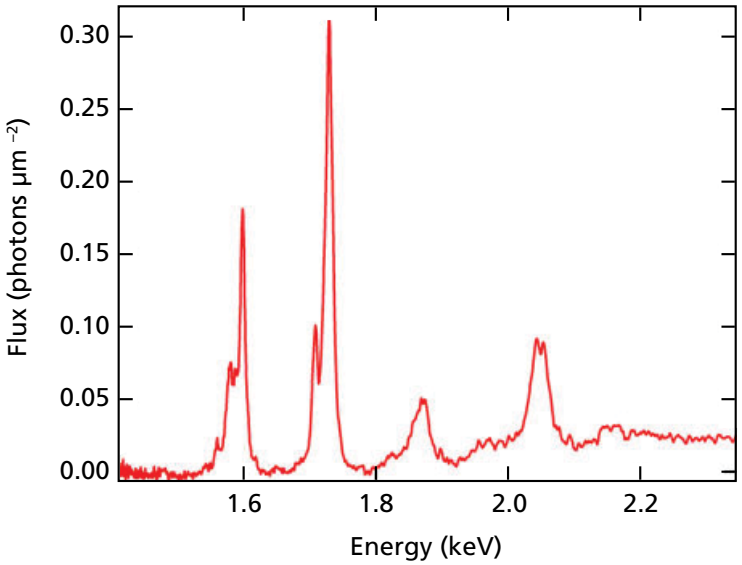
X-ray film spectrometers use crystals to disperse X-rays in a variety of geometries to give the X-ray spectrum relevant to an experiment. The spectrometers used on Orion are all deployed in an Orion Ten Inch Manipulator (TIM).



A number of spectrometers are used in Orion whose details are given in the links below:

Twin Crystal Spectrometer

Horizontal Belfast Spectrometer

Vertical Belfast Spectrometer

Precision Orientation Spectrometer

Time Integrated Focusing Spectrometer

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