

Supermirror optimisation for instrument optical devices at the ILL

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This poster presents some recent achievements in the field of multilayer neutron optics. After the success of the prototype solid-state s-bender polariser [1], Fe/Si polarising supermirrors tend to be used on a large scale at the ILL for polarising devices. Up to $m=4$ supermirrors have been coated successfully, and a few examples of applications will be given. Other collaborative developments involving multilayers will be mentioned, such as Ni/Ti supermirrors for the development of a 2D focusing mirror.

[1] A. Stunault et al., *New solid state polarizing bender for cold neutrons*, *Physica B* 385, 1152 (2006).