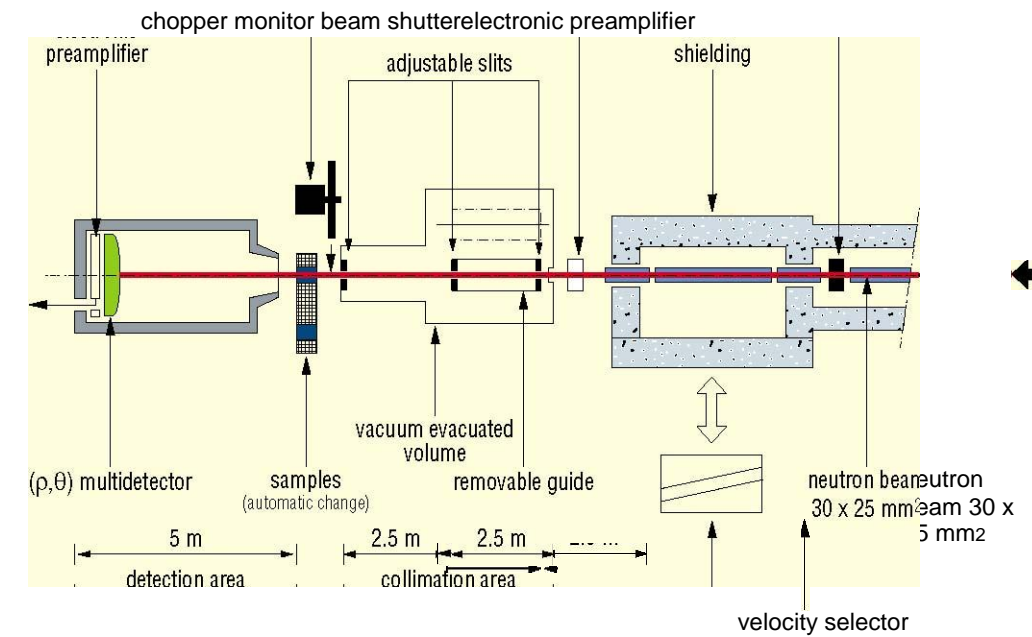


Small Angle Neutron Scattering facility PACE
(isotropic scattering)

Beam tube	Neutron guide G1 (cold source), supermirror coating $2\theta_c$ (cutoff : 3 Å)
Monochromators	Mechanical selector (DORNIER) $2 \text{ \AA} < \lambda < 40 \text{ \AA}$ with $\Delta\lambda/\lambda$ between 5% and 10% (hwhm) depending on the tilt angle (between 0 and 10°).
Max. beam size at specimen	$2.5 \times 3 \text{ cm}^2$
Typical size	$0.7 \times 0.7 \text{ cm}^2$
Beam collimation	with 2 diaphragms between 0.7 and 2.5 cm diameter, distant from 2.5 or 5 m depending on the distance between sample and detector.
Detector	BF_3 position sensitive multidetector made of 30 concentric rings of 1 cm width. First ring radius : 3 cm ; last ring radius : 32 cm
Typical range of accessible scattering vectors	$2 \times 10^{-3} < q (\text{\AA}^{-1}) < 0.5$
Available sample surroundings	- automatic sample changer for 16 different samples for temperature between 10 and 80°C - cryostat (2 K) and displax (10 K) - furnace ($50 < T(^{\circ}\text{C}) < 300$)
Data collection and instrument control System	EURO modules from LLB (independent and intelligent IEEE 488 instruments)
Computer driving :	PC and WINDOWS operating system

PACE is a small angle neutron scattering spectrometer dedicated to the study of isotropic small wavelengths (down to 2 Å) that offers the scattering. It is equipped with a position sensitive possibility of extending the scattering vector multidetector made of 30 concentric rings centred range to high values without shadow due to the around the beam. This is its main feature sample surroundings. making treatment and rapid estimation of data The spectrometer is equipped with a sample specially easy. changer that allows to plan the automatic The monochromator is provided by Dornier measurement of 16 different samples. Embh, and has the particularity of being very It is computer-driven with a WINDOWS software compact that allows retracting it without sub-that allows a complete automatic adjustment stantial handling. The experimentalist can thus of the spectrometer (centring of the beam easily work on white beam using the time of and samples, attenuator optimisation...) and flight method. measurement programming.

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General layout of the spectrometer G 1-2.

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