

Alternative Concepts for Beam Monochromatization

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Many applications like structural crystallography or deconvolution of complex patterns benefit from monochromatic X-rays. Traditionally monochromators include, for example, Johansson monochromators, 4-crystal-monochromators or so-called hybrid monochromators (i.e. combinations of a parabolic graded multilayer and a channel cut crystal). The drawback of these types of monochromators is typically the strong reduction of intensity and limited flexibility due to geometrical limitations.

In this presentation we are discussing alternative concepts for beam monochromatization and compare their advantages and disadvantages with traditional monochromators.