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## **PS1-04: Optimal Conditions for Positron Radiation in Crystal Undulators**

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Though crystal undulators (CUs) were devised long ago, reliable realistic description of their functioning has become possible only after the recent development and experimental validation of the corresponding simulation tool. A thorough numerical analysis of both conducted and suggested experiments reveals limited perspectives of development of electron CUs and stimulates a return to the investigation of the positron case. We demonstrate that both optimal undulator parameters and maximal positron energy exist for the latter. Among other matters, positron energy is limited by the radiation line broadening caused by the longitudinal velocity dispersion. A method of suppression of the latter, allowing to narrow the CU radiation spectrum, is suggested.

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