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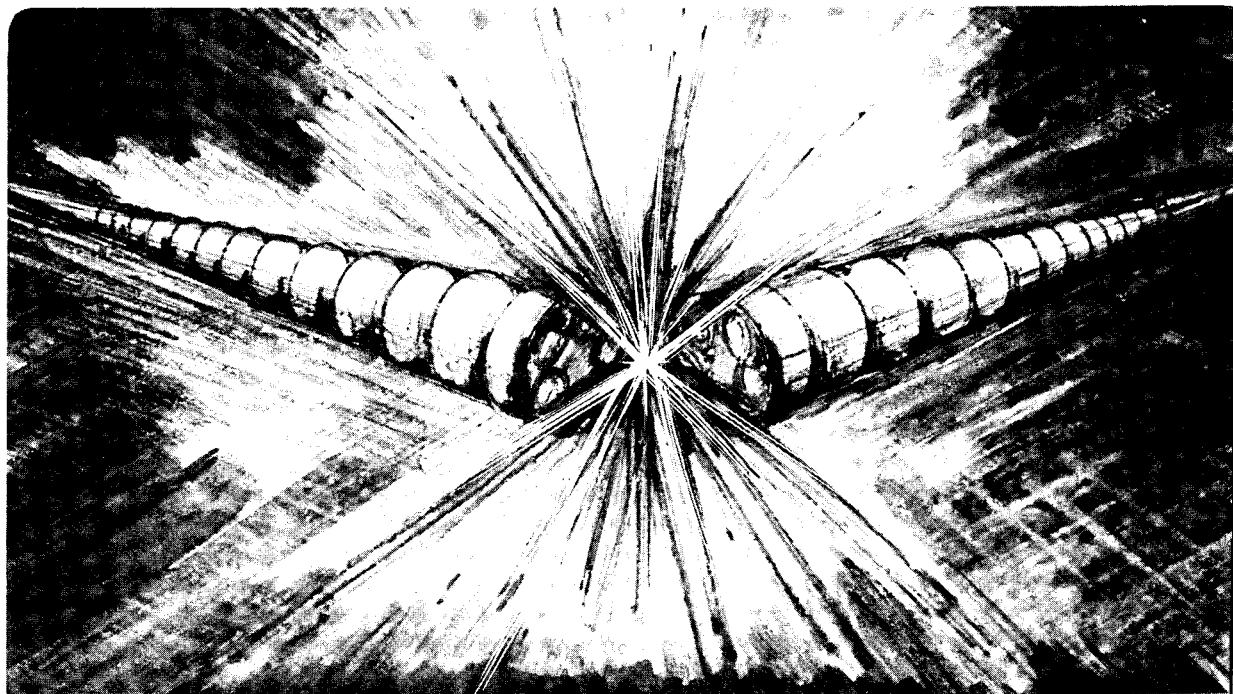
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Recent Advances in the Generation and Application of Synchrotron Radiation

B.M. Kincaid

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Recent Advances in the Generation and Application of Synchrotron Radiation.*

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A new generation of synchrotron radiation light sources covering the VUV, soft x-ray and hard x-ray spectral regions is under construction in several countries. These sources are designed specifically to use periodic magnetic undulators and low-emittance electron or positron beams to produce high-brightness near-diffraction-limited synchrotron radiation beams. Some of the novel features of the new sources will be discussed, along with the characteristics of the radiation produced. Potential applications and experiments in atomic and molecular physics taking advantage of the high flux, broad tunability, and spectral coverage of the new sources will be discussed.

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