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Similarity Between Synchrotron Radiation and Photons Leaving Bent Optical Fibers

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Synchrotron radiation and light escaping a bent optical fiber are very similar. In both cases the photons are emitted at some impact parameter (IP) away from the electron trajectory or from the fiber. The IP profile is a Airy function, the fringes of which are interferences between two emission points. Optical systems for observing these fringes are suggested.

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