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## Cornell Integrating Pixel Array Detector Development for Synchrotron X-ray Light Sources

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Synchrotron light sources are capable of producing x-ray synchrotron radiation of extreme brilliance and coherence. These sources create opportunities to exploit experimental techniques in both time-resolved and coherent x-ray imaging experiments, assuming the availability of area detectors designed to capture and record the relevant and desired x-ray information. Capturing this information presents challenges for both the speed and dynamic range of the imaging detectors. The on-going integrating detector development efforts at Cornell addressing these needs will be presented. These will include high-speed and high-dynamic range detectors that have been developed by the group and recently used in scientific collaborations at synchrotron sources; and less mature development efforts aimed at increasing detector capabilities with an eye on future light source and experimental capabilities.

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