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Strangeness in nuclei: new insights into nuclear structure¹ JOHN MILLENER, Brookhaven National Laboratory

There has been a renaissance in studies of hypernuclei. A series of experiments at KEK and BNL have used the Hyperball Ge array to investigate γ -ray transitions in p-shell hypernuclei with unprecedented precision (~ keV resolution). About 20 γ -ray transitions have been observed, leading to the determination of seven doublet spacings. At Jefferson Lab, there has been a series of experiments demonstrating the feasibility of high-resolution (sub MeV) electroproduction studies of hypernuclei, providing complementary information (and improved resolution) relative to the traditional meson-induced reaction techniques. Each of these programs has new results and substantial planned extensions in the near future. What we have learned, and hope to learn, from this unique window into both nuclear structure and the nature of strong interactions will be reviewed.

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