

Energy-Doubled Bragg Scattering, CESR-X/FEL
and Depth-Selective X-Ray Diffraction

by

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As high energy physics winds down, one searches for new fundamental investigations made possible by the fourth generation light sources made possible as colliding beam facilities are decommissioned. One example would be to observe, and later exploit, a process (well known for visible light) in which two Angstrom-photons combine to form one half-Angstrom-photon. A scheme to achieve this at CESR is described.