Experimental results for the HXR self seeding scheme

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I will present the experimental results for the HXR self seeding scheme, proposed by the colleagues of DESY*, and implemented at the LCLS. A reduction of the bandwidth by a factor 40-50 times was observed in respect to SASE at 8.3 keV in the low charge 40 pC mode. The statistical properties of the self-seeded photon beam will be presented comparing experimental results and simulations, particularly the effect of the machine jitters will be discussed.

*G.Geloni, V.Kochrayan and E.L. Saldin DESY 10-133, arXiv:1008.3036(2010)