

Abstract Submitted  
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**Toward ultra high intensities laser plasma interaction on solid target at ALLS** SYLVAIN FOURMAUX, STÉPHANE PAYEUR, SÉBASTIEN BUFFECHOUX, CRISTINA SERBANESCU, JEAN CLAUDE KIEFFER, INRS-EMT — We demonstrate the implementation of laser beam wavefront correction on the 200 TW laser system at the Advanced Laser Light Source facility. Ultra high intensities higher than  $10^{20}$  W.cm<sup>-2</sup> is reported. To our knowledge, this laser system is the first 100 TW scale to combine simultaneously ultra high intensity, higher than  $10^9$  laser pulse contrast ratio and 10 Hz high repetition rate. These characteristics are necessary to be able to implement practical high mean flux applications of secondary source resulting from the interaction of such high intensity laser pulse with solid targets. We will present the experimental program planned with this system next year.

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