

Abstract Submitted  
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**Linewidth measurement of table-top EUV laser** LUKASZ URBANSKI, MARIO MARCONI, JORGE ROCCA, Colorado State University, LIMIN MENG, ANNIE KLISNICK, Centre National de la Recherche Scientifique, COLORADO STATE UNIVERSITY, FT. COLLINS, CO, USA COLLABORATION, CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, PARIS, FRANCE COLLABORATION — We report on linewidth measurement of a capillary discharge EUV laser. The measurement principle was based on the wavefront division interference. The wavefront of a neon-like argon,  $\lambda=46.9\text{nm}$ , EUV laser was split and brought to interference in a Fresnel bi-mirror interferometer setup. The optical path difference was varied in order to obtain interference fringes visibility curves. From these curves it is possible to evaluate the linewidth of the laser amplifier. No line rebroadening due to Doppler effect was observed when the laser medium length was changed. Different plasma conditions were applied by varying the discharge conditions.

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