



1. Title:	Analysis of the effects of a small area magnetic field for the mitigation of the debris emitted by a laser plasma source
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3. Abstract body:

Although, as it is well known, magnetic fields can not fully stop the debris emitted by plasma sources, a small area (few cm²) magnetic field can not only reduce the number of debris but also significantly modify their spatial and velocity distribution. This effect can be exploited to improve the efficiency of other debris mitigation systems so that the total mitigation factor can result to be much bigger than the simple product of each component of the chain.

Faraday cup measurements of the ionic debris speed distribution at different angles and for different values of a small size magnetic field applied in proximity of a laser plasma source are presented. The design of the magnet is suitable for a large cone (> 90°) of collectable EUV radiation from the source.