

## **Absorbtion and radiative properties of laser irradiated foam targets**

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At the ABC laboratory of the ENEA Research Center in Frascati (Rome) an experimental campaign to characterize the laser radiation absorption of foam targets and the subsequent emission of radiation from the produced plasma was carried out. Different targets have been used: plastic in solid or foam state and metal targets. The activated different diagnostics allowed to evaluate the temperature, the density distribution, the fast particle and the X-ray spectrum of the plasma produced with the different targets, confirming the foam homogenization action on laser-plasma interaction, mainly attributable to the volume absorbtion of the laser radiation propagating in such structured materials.

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