Objective and Motivation
To study the effects of deposition parameters on the structure of the grown film, and tailor it towards specific applications in fusion technology.

PLD is a non-thermal method capable of creating ablated species with high kinetic energies (50-100eV) offering novel growth regimes.

Fusion tokamaks such as ASDEX and JET are utilizing graphite coated Tungsten tiles as plasma-facing components.

Till now there have been scarce reports on the growth of Tungsten by PLD.

Conclusions
Wide range of growth regimes available to PLD: implantation, shot-peening effects, aggregation.

Deposition parameters show direct effect on film properties such as crystalline phase and structure.

Laser fluency is seen to increase deposition at an exponential rate, which is an important issue should the coating process need to be scaled up.

Future Prospects
A thorough determination of stress in the films deposited as well as texture and preferred grain orientation.

The development of more Tungsten coatings on graphite pucks with thickness over 3um

Acknowledgments
This work was supported and funded by the Lebanese CNRS.