# 9th International Conference on New Frontiers in Physics (ICNFP 2020)



Contribution ID: 268 Type: Talk

# Nanoplasmonic Laser Fusion Target Fabrication - Considerations and Preliminary Results (NAPLIFE Project)

Friday, 11 September 2020 12:00 (30 minutes)

The talk is related to a Hungarian collaboration, NAPLIFE: Nano-plasmonic Laser Inetial Fusion Experiment, and will focus on considerations and preliminary results regarding the target fabrication. The goal is the development of a bulk-nanocomposite, where the concentration of nanoparticles is controlled along the normal direction. The talk will address the following topics: 1) theoretical modelling of nanocomposites, the effect of nanoparticle shape, size and orientation on the absorbance of the target; 2) nanocomposite preparation; 3) target fabrication methods; 4) characterization of the prepared nanocomposite layers with ellipsometry and optical spectroscopy; 5) preliminary irradiation results, characterization with Raman spectroscopy.

# Is this abstract from experiment?

Yes

### Internet talk

Yes

## Name of experiment and experimental site

Nano-plasmonic Laser Inetial Fusion Experiment, Budapest, Hungary

# Is the speaker for that presentation defined?

Yes

# **Details**

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Session Classification: Workshop on Laser fusion

Track Classification: Workshop on Laser Fusion, a spin-off from heavy-ion collisions