





As part of the ADDITIVE MANUFACTURING course, we are pleased to announce the seminar entitled:

Evolution of Metal Additive Manufacturing and DfAM applications

Monday 9th December 2024 – 10:30 am "**BOBBIO**" room, 1st floor , Piazzale Tecchio 80 – 80125 Naples

Additive manufacturing has seen incredible growth rates during the last two decades. One of the key drivers of success was the steadily improvement of the laser powder bed fusion process. The Optical Tomography (OT) system of EOS is used together with a feedback loop in order to control critical process parameters. This approach enables several benefits such as constant part temperatures, significantly reduced support structures, reduced internal stresses as well as improved dimensional accuracy. Not only part quality significantly improved, but also cost per part were reduced by an increase in build rates. Additionally, variable energy density distribution laser sources and Design for AM (DfAM) play a big role in the field of Laser Powder Bed Fusion (LPBF) to push further the boundaries of the technology.

Topics to be presented:

- Basich introduction: LPBF and DfAM
- Why are Support structures needed? Can we get rid of them?
- OT and Smart Fusion
- nLight and beam shaping
- DfAM application Case(s)
- O&A Session

which will be given by:

Vincenzo Abbatiello

M.Eng. Aerospace Engineer
Senior Additive Manufacturing Consultant
EOS GmbH Electro Optical Systems





Speaker Bio

Vincenzo got a Bachelor's and Masters' degrees in Aeronautical and Aerospace engineering at University of Naples "Federico II" in 2017, specialized in design and optimization of aeronautical structures. Currently he is enrolled as PhD student at TU Darmstadt. Since 2018, he has supported EOS customers using his passion for design & creativity in AM. He performs projects simulating, designing, optimizing and manufacturing parts using SLS and LPBF technologies. His main qoal is always to get the best out of Additive Manufacturing, from idea to serial production.

