



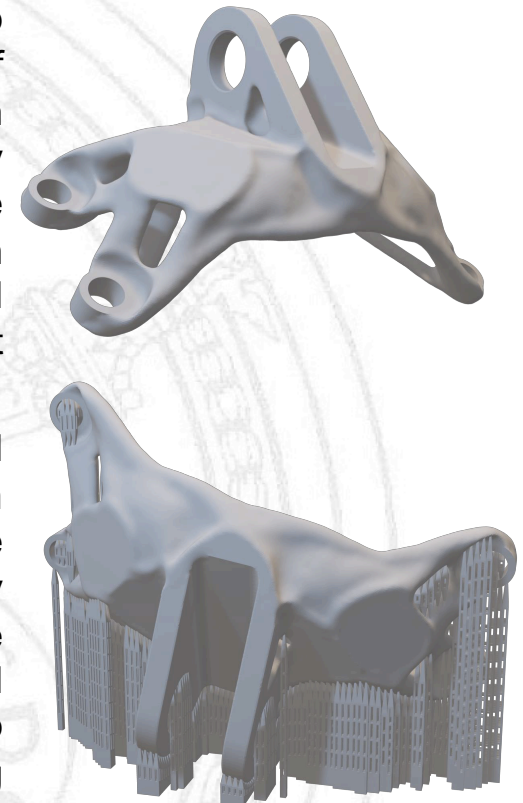
SEMINAR

A Platform of Tools for Additive Manufacturing

Additive Manufacturing (AM) technologies would undoubtedly help meeting new and competitive industrial needs, such as production of lightweight and customized components. New methodologies of Design for Additive Manufacturing (DFAM) and relative CAx tools are the key enabling technologies allowing to get the major benefits from AM. The current tendency by software developers is to preserve their main functions while adding features for AM. Nonetheless, it is more and more evident that an increased integration would lead to a more efficient design and engineering workflow.

In this paper, a novel integrated platform for AM design is proposed, and results of a workflow based on it are illustrated. Starting from geometrical, functional and structural product specifications, the platform includes a topological optimization phase, new geometry construction, automatic FEM discretization. After FEA validation of the new geometry, optimal orientation is found and supports are created related to the component. The presented platform is the first step towards a fully integrated product & process design & engineering workflow

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July 11th, 10:30am (sharp)
DICAr MS1 Meeting Room
Via Ferrata, 3 – Pavia