Henrik

Kruse

Research Associate



ENTWEDER... ODER?

Film or series? Series

Coffee or tea? Coffee

Sunshine or snow? Snow

Chocolate or chips? Chocolate

City or village? Village

Elevator or stairs? Stairs

AM LEHRSTUHL ...

 \dots I'm responsible for $\underline{}$

project management in the Digital Product

group

Thematically I deal with

design and simulation in metallic additive manufacturing

The goal of my research is to,

design applicationoptimized support structures in LPBF

For this I particularly work with

CAx software, various LPBF systems

This is the advantage of my research:

Use of developed designs in lightweight construction, aerospace and automotive industries

However, it is also possible to transfer the results to these industries:

various industries from turbo machinery and medical technology

This is the impact of my research on the future:

Increasing resource efficiency: reducing material, time, and cost of the LPBF process chain

MY MOTIVATION

That's what I studied:

Materials Science, specialization: construction materials and surface technology

For this reason, I decided to go for Additive Manufacturing:

Indispensability of material and material science for technological innovations

I am especially excited about these AM-possibilities:

Exchange with interdisciplinary and multicultural colleagues

I am glad about these opportunities at the DAP Chair: Collaboration with strategic partners from the extensive network of the chair

In my dissertation I will deal with this topic: Innovative support structure design in powder bed based laser beam melting