Additive manufacturing processes are already being used successfully in wide-ranging areas such as the automotive industry, mechanical and plant engineering and medical technology. Due to the high flexibility, targeted variation of the machine parameters and the often contactless production, there is a considerable added value compared to conventional processes. A decisive factor in the process chain of additive manufacturing is the design. Components can be newly or differently designed and optimised, for example, with regard to their topology. For an evaluation of suitability, potentials and requirements must be specified, geometries must be designed and components must be simulated and validated. In addition, a close link between internal company processes and business models and design is necessary.

## **Programme Committee\***

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Prof. Dr.-Ing. Detmar Zimmer

KAt - Universität Paderborn

Cover image: Additively manufactured triple clamp

\* As of 26 March 2021



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https://www.lzh.de/en/aboutus/contactandmap

#### Supported by:









# Call for Abstracts: **Innovative Product Development** by Additive Manufacturing 14 September 2021



### Submit your abstract by 18 May 2021

Papers of accepted abstracts will be published in an ISBN numbered book by Springer Vieweg



## **Workshop Topics**

### Specifications, potentials and solutions

Contributions to specifications on components and processes, methods for assessing the suitability of components and the application of additive manufacturing as well as finding solutions for concepts and design.

## **Design and Optimization**

Contributions to the development and design of components, their design to ensure functional requirements and manufacturability as well as methods and tools for optimization components.

### Simulation, validation and quality assurance

Contributions to approaches for the computer-aided and physical validation of components, the testing of components and material as well as measures to ensure quality aspects.

## Process chain and business models

Contributions to the integration of additive manufacturing processes into existing processes, measures to increase value creation and the creation of new business models.

## Program

Podium Session IV

Closing

Welcome

| Podium Session I  | 09:15 - 10:30 | Acceptance Notification               |
|---|---------------|---------------------------------------|
| Coffee Break  | 10:30 - 11:00 | Paper Submission Deadline             |
| Podium Session II   | 11:00 - 12:15 | Paper Review                          |
| Lunch Break Demonstration of additive manufacturing in the LZH's shop floor | 12:15 - 13:45 | Final Paper Submission / Registration |
|   |               | Workshop                              |
| Podium Session III  | 13:45 - 14:45 |                                       |
| Coffee Break  | 14:45 - 15:15 |                                       |
|   |               |                                       |

09:00 - 09:15

15:15 - 16:15

16:15 - 16:30

### Contributions

**Abstract Deadline** 

Informal abstracts of maximum 150 words can be submitted by e-mail to AM@ipeg.uni-hannover.de until 18 May 2021.

Timeline and Submission Dates

18.05.2021

27.05.2021

30.06.2021

30.07.2021

03.09.2021

14.09.2021



Manufacturing using coaxial laser-wire deposition welding



Simplifying structures: One part instead of three



Repairing parts using laser powder bed fusion (LPBF)