

# Cluster of Excellence Internet of Production (IoP) – Workstream A.III

## *In-Process Recognition and Compensation of Defects in Additive Manufacturing (AM)*



### Motivation and Relevance

- Implementing AI models to detect and categories anomalies as well as compensate defects is still difficult and requires expertise
- The lack of standardized data formats prevents AM users and service providers from connecting and using the data

### Approach

- Generation of high-quality PBF-LB/M monitoring data as basis for development of data-driven algorithms
- Expert knowledge from PBF-LB/M perspective to facilitate data fusion for inhomogeneous data sources

### Results

- Detection of anomalies using computed tomographic scans and a supervised learning approach
- Follow-up collaboration for defect classification after finishing anomaly detection with process monitoring setup at DAP

### Research Area

- Quality Control
- Digital Twin
- Machine Learning
- Data Fusion

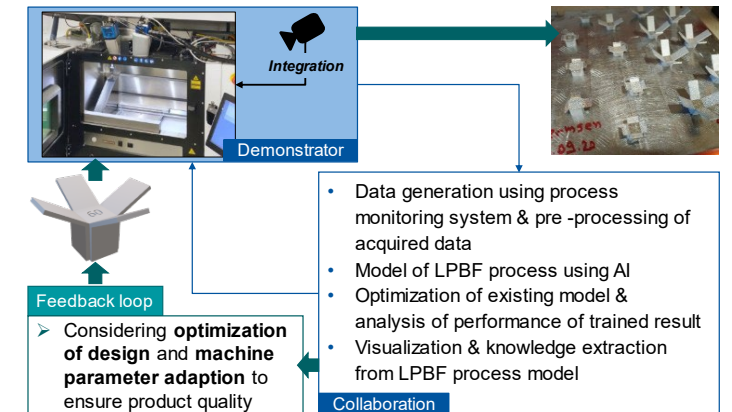
### Partners




### Supported by



### Picture



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