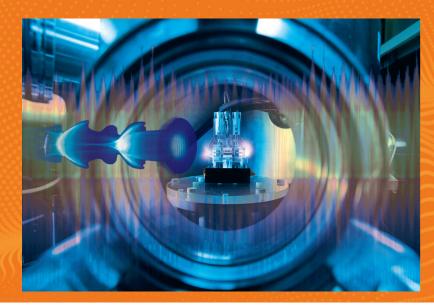
# ACCLAIM - KICK-OFF MEETING

Frank Gaede, DESY Matt Zepf, HIJ









GSI Helmholtzzentrum für Schwerionenforschung GmbH













### **ACCLAIM - Overview**



- Innovationpool Project ACCLAIM Accelerating Science with Artificial Intelligence and Machine Learning
- Development and Application of AI and ML methods to some of the most challenging problems in the area of giant data sets in the fields of photon science, particle physics and accelerator science.
- Build on and extend the work started in the AMALEA project by including new partners and adding new topics: laser driven plasma acceleration, anomaly detection and application of quantum computing.
- 3 year project 1.1.21-31.12.23
- Partners:
  - DESY, GSI, HIJ, HZB, HZDR, KIT



# **Workpackages and Budget**



- Al-Methods for real time optimisation of plasma accelerators and their laser systems (DESY, HIJ, HZDR, KIT)
- Application of AI to tuning and control of accelerators (DESY, GSI, HZB, KIT)
- Maschine assisted anomaly detection and fault prediction (DESY, GSI, HZB, KIT)
- ML-Methods for efficient simulation (DESY/HZDR)

Finanzierungsplan für 2021 bzw. pro Jahr (bei jährlich gleichbleibenden Kosten)							
	DESY	GSI	HIJ	HZB	HZDR	KIT	Summe
	kEuro						
Gesamtkosten							
Personal	345	65	35	80	98	125	748
Sachmittel	0	0	0	0	0	0	0
Investitionen	0	0	0	0	0	0	0
Beantragt im Innovationspool	225	15	28	80	98	105	551
Zusätzliche Mittel der Projektpartner (optional) <sup>1</sup>	120	50	7	0	0	20	197



## **Goal for Today**

- getting to know each other
- plans and goals for ACCLAIM
- already existing work and collaborations
  - -> see agenda

- have short discussion at the end about organising the project:
  - regular Meetings
  - F2F Meetings
  - working group meetings

...





#### **Discussion**



- regular Meetings proposal:
  - have regular meetings every three or four weeks (similar to AMALEA)
  - round table w/ very short ( 2 slide) presentations
  - have one scientific presentation
  - · ...
- working group meetings:
  - there should probably be additional working group meetings
  - identify common problems and exploit synergies
  - ...
- F2F Meetings proposal:
  - have one Annual "in person" Meeting
  - start with first annual meeting in fall 2021 (if possible)



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