

Welcome to CO@WORK at Zuse Institute Berlin

*Prof. Dr. Sebastian Pokutta
Vice President*

OVERVIEW
SUMMER 2024



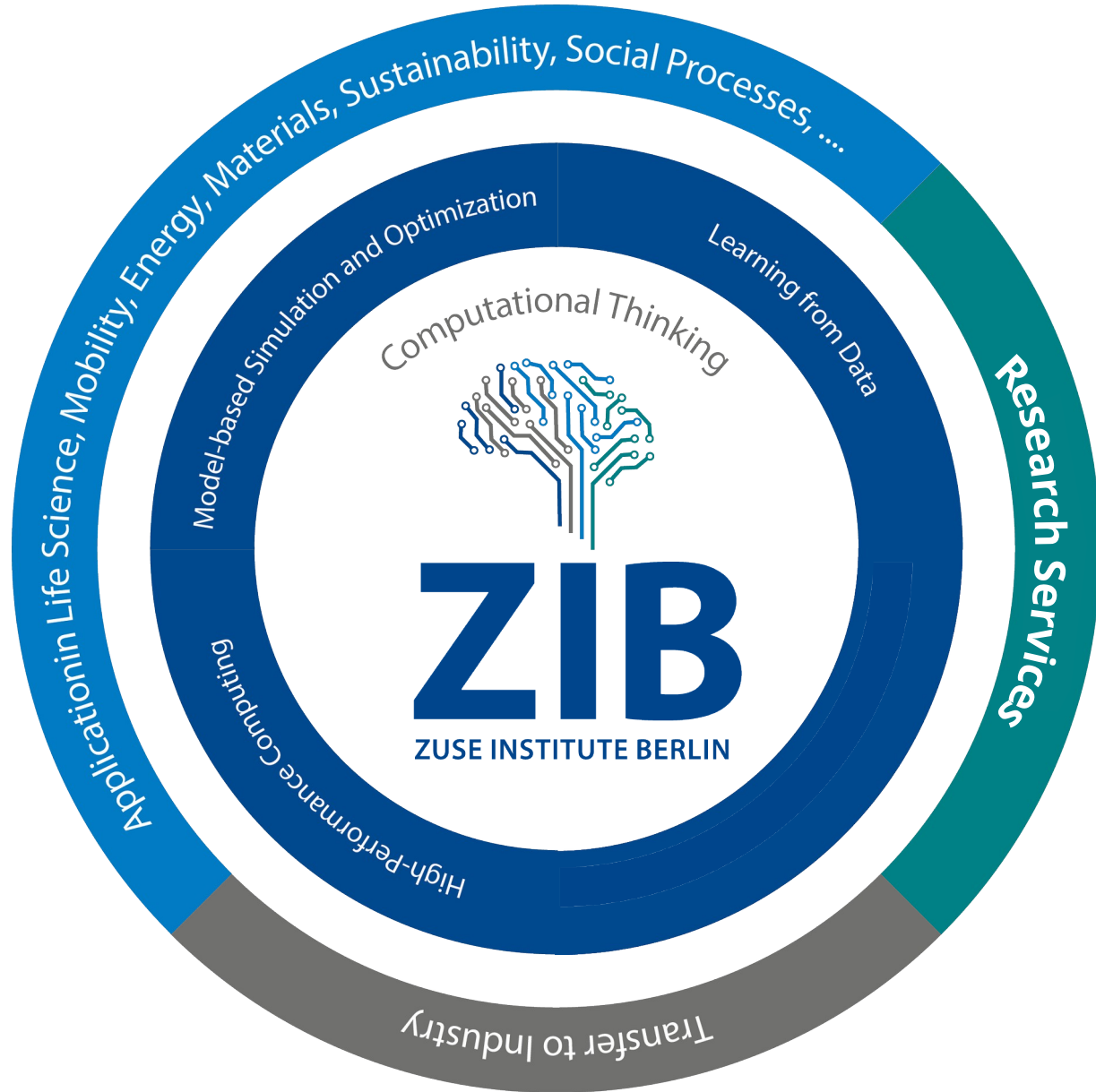
CO@WORK in a nutshell

- 7th Summer School
- Started in 2005 with about 100 participants
- Roughly every 4 years
- Last installment in May 2020 (online)

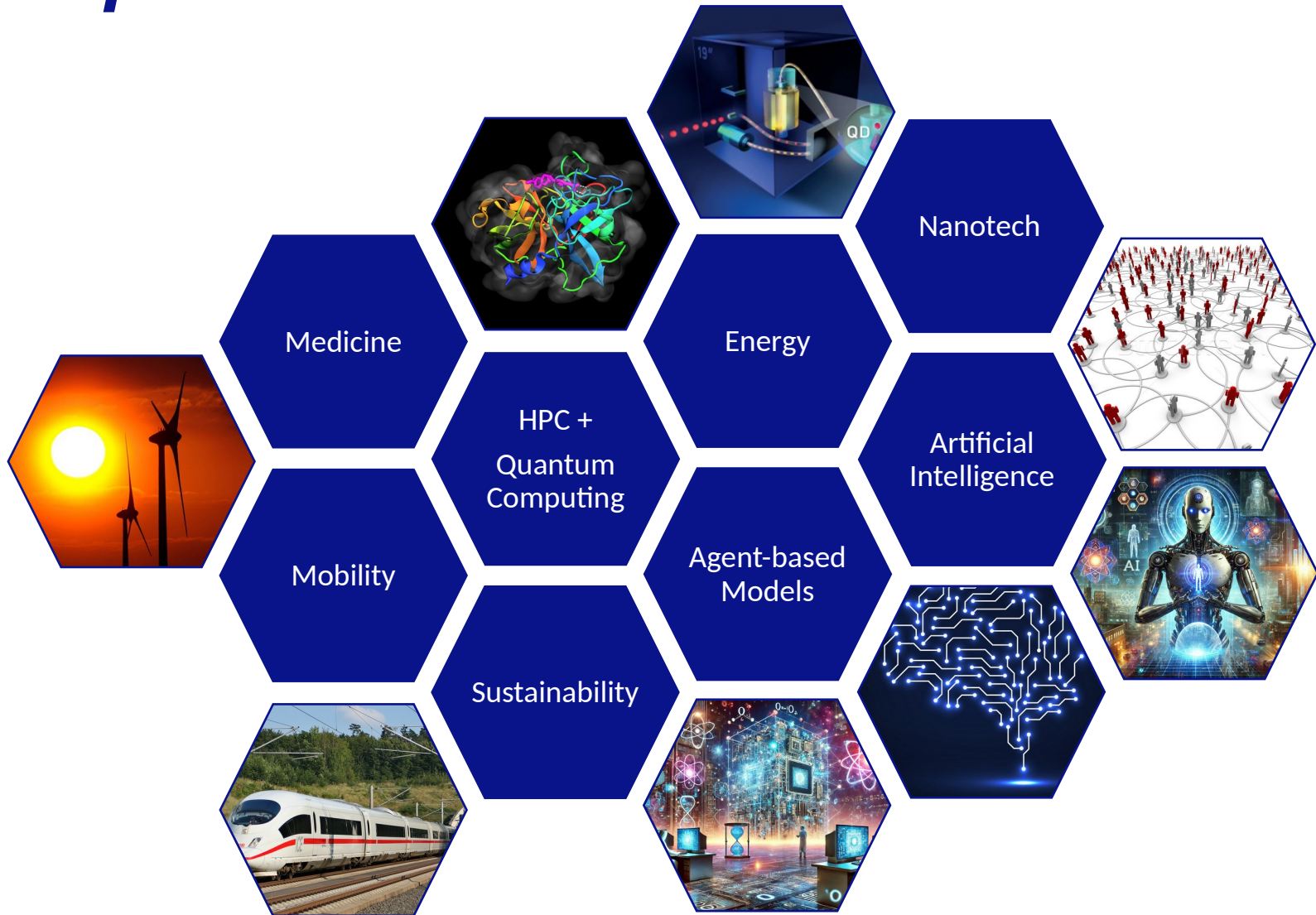
CO@WORK 2020
fully online > 1000
participants



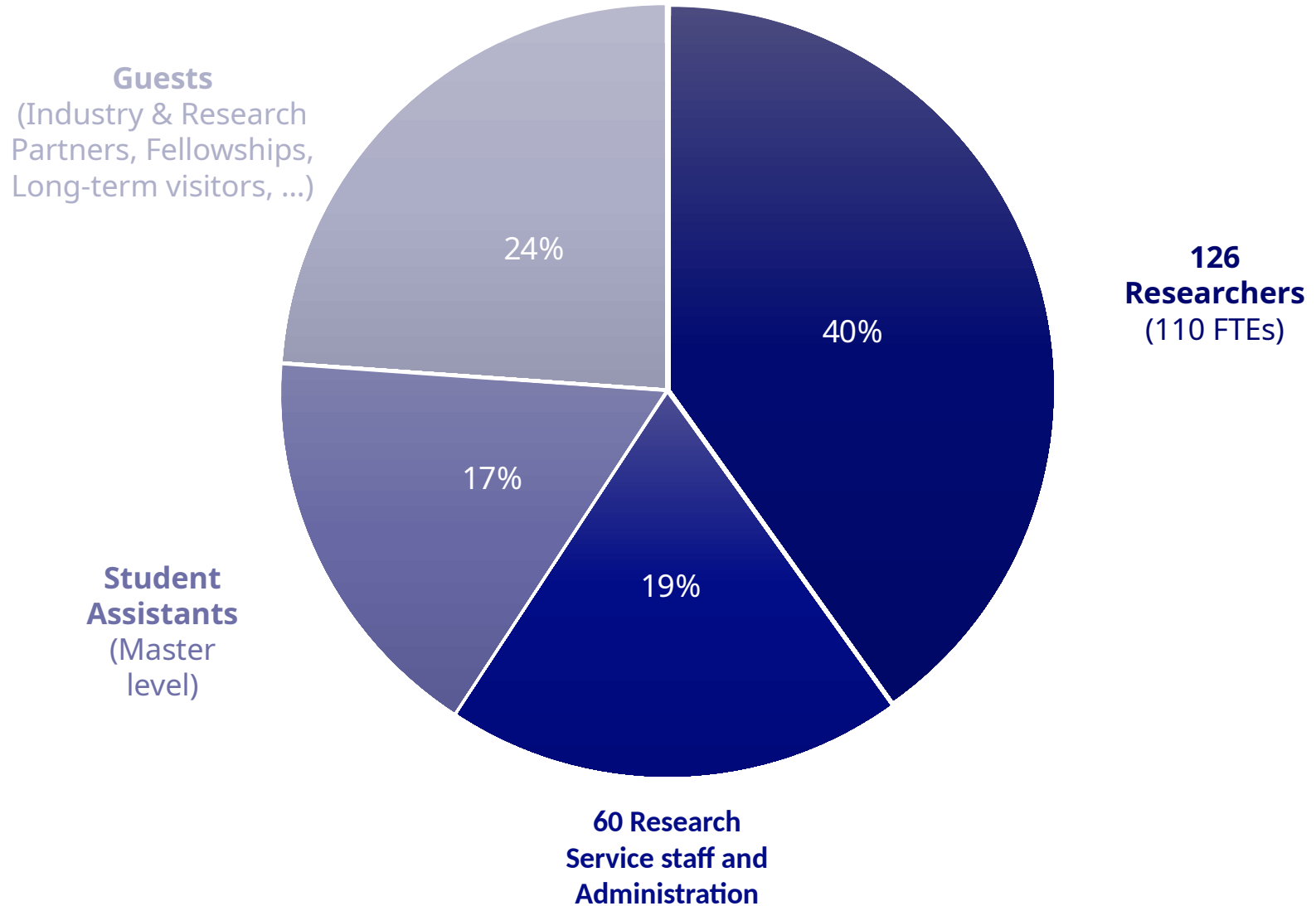
ZIB in a Nutshell



Applied Mathematics and Computer Science



ZIB Members (2022)



Sample Partners and Collaborations



Sample Partners and Collaborations



WestRock



Das Auto.



JC ATM Services



KREDIBLE

DAIMLER



Panasonic



SAINT JOSEPH'S Hospital



SIEMENS

chico's FAS logo



MANHEIM Auctions



BILL & MELINDA GATES foundation



Grand Challenges Canada
Grands Défis Canada

SFB 805



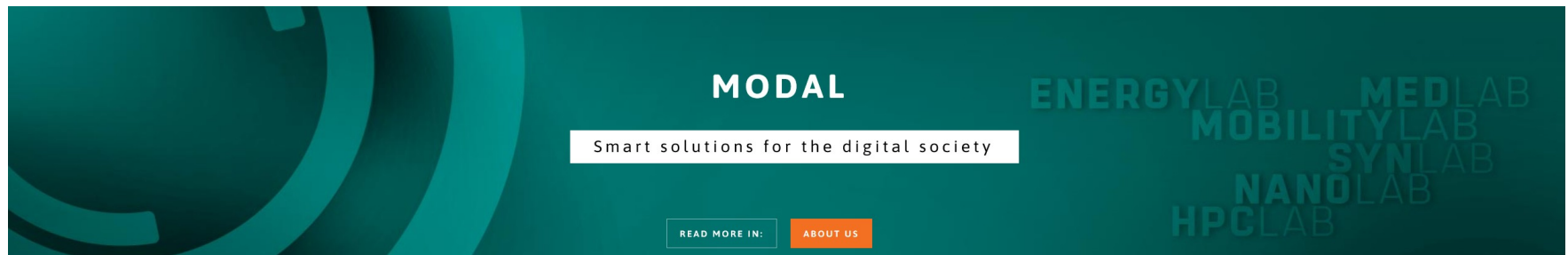
USAID
FROM THE AMERICAN PEOPLE



Research Transfer: MODAL

Second Funding Period for the Research Campus MODAL

- 60+ Researchers
- 2020-2025:
 - Funding of EUR 10m from BMBF
 - Matched by >EUR 14m from 35 industry partners
- Largest Public-Private Partnership in (Applied) Mathematics in Germany



 EnergyLab	 MobilityLab	 MedLab	 NanoLab	 HPCLab	 SynLab
Smart control of energy transport networks	Optimal planning for traffic networks	Smart solutions for digital precision medicine	Smart design of resonant nanostructures	Solutions for High-Performance Optimization	High-performance optimization software

NHR Alliance: members and their locations



- Rhein-Westfälische Technische Hochschule Aachen,
- Zuse Institut Berlin,
- Technische Universität Darmstadt,
- Technische Universität Dresden,
- Friedrich-Alexander-Universität Erlangen-Nürnberg,
- GWDG/Georg-August-Universität Göttingen,
- Karlsruher Institut für Technologie,
- Johannes Gutenberg Universität Mainz in behalf of the consortium Süd-West (Goethe-Universität Frankfurt, Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau, Johannes Gutenberg Universität Mainz, Universität des Saarlandes), and
- Universität Paderborn.

Some Key Numbers of the NHR Alliance



more than **6 billion** CPU core-hours made available per year



Jointly, almost **180 HPC experts** and staff member



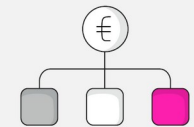
Almost **1800 scientific articles** published between 2021 and 2023 supported by NHR computing resources



Almost **2000 projects** started between 2021 and 2023



Joint application portal developed and put into use



Joint annual budget of **65 million EUR**

Join us at ZIB

- **International Student Research Visits (2-6 months):**
 - For undergraduates or Master's students from other universities.
 - Requirements: Background in mathematics, CS, or related fields.
 - Apply 2-4 months before preferred start date, including CV, transcript, and motivational letter.
- **Bachelor and Master Theses (Berlin universities):**
 - Supervision for students at Berlin universities.
 - Requirements: Alignment with our research and engagement in respective courses.
 - Limited slots available; apply early with a CV, transcript, and motivational letter.
- **PhD Positions (Berlin universities):**
 - Research as a PhD student with potential teaching opportunities.
 - Requirements: Strong background in mathematics, CS, or related fields; specific research interests.
 - Apply 3-6 months before preferred start date; include detailed CV, transcripts, research statement, and recommendations.
- **Postdoctoral Research Opportunities:**
 - Collaborate on advanced research projects.
- **Interested? Contact Us!**
 - Email: applications-aisst@zib.de
 - Include all relevant documents and information in your email.



Thank you!

- All speakers, exercise session organizers, and breakout session organizers
- CO@Work Organizers:
Timo Berthold, Ralf Borndörfer, Ambros Gleixner, Thorsten Koch, and Milena Petkovic
- And the Sponsors:



Berlin Mathematics Research Center



Hochschule für Technik
und Wirtschaft Berlin

University of Applied Sciences

