



JACOBS
UNIVERSITY



1st Annual Research Day

Jacobs University Bremen

October 5, 2022

Theresa Roewer, Franziska Deutsch, Marc-Thorsten Hütt, Sören Petrat

Participants

- Giuseppe Abreu
- Andreas Birk
- Klaus Boehnke
- Klaus Boehnke, Franziska Deutsch, Ulrich Kühnen
- Klaudia Brix
- Omid Fatahi Valilai
- Ben Godde
- Igors Gorbovickis
- Fangning Hu
- Marc-Thorsten Hütt
- Stephan Juricke
- Stefan Kettemann
- Ulrich Kortz
- Ulrich Kühnen, Klaus Boehnke, Franziska Deutsch, Sonia Lippke, Jan Lorenz
- Christoph Lattemann
- Alexander Lerchl
- Sonia Lippke
- Jan Lorenz
- Keivan Mallahi-Karai
- Arnulf Materny (Patrice Donfack)
- Artem Naumov, Alexander Kochetkov
- Elke Nevoigt
- Sören Petrat
- Gerd-Volker Röschenhalar (Volodymyr Kozel)
- Andreas Seebeck
- Sebastian Springer
- Tobias ten Brink
- Julia Timpe
- Matthias S. Ullrich
- Yilmaz Uygun
- Hendro Wicaksono
- Adalbert Wilhelm
- Mathias Winterhalter

Prof. Dr. Giuseppe Abreu

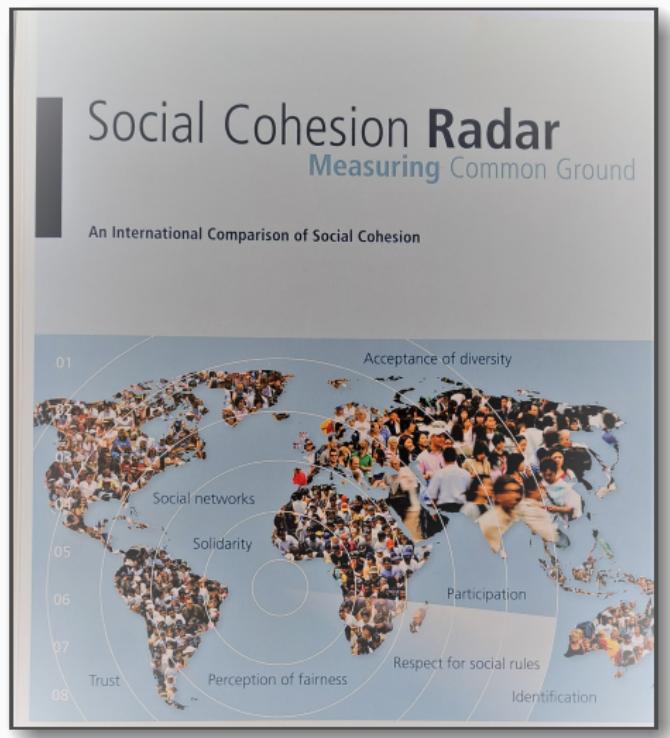
Wireless Communications and Signal Processing

Andreas Birk

Robotics



Klaus Boehnke

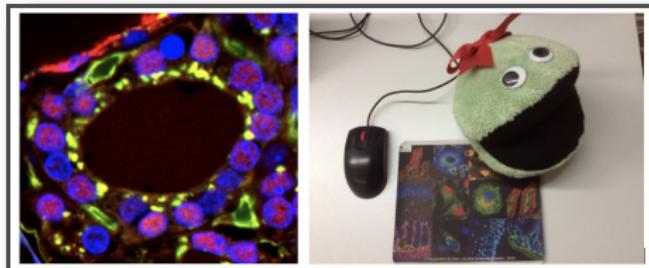


Klaus Boehnke, Franziska Deutsch, Ulrich Kühnen

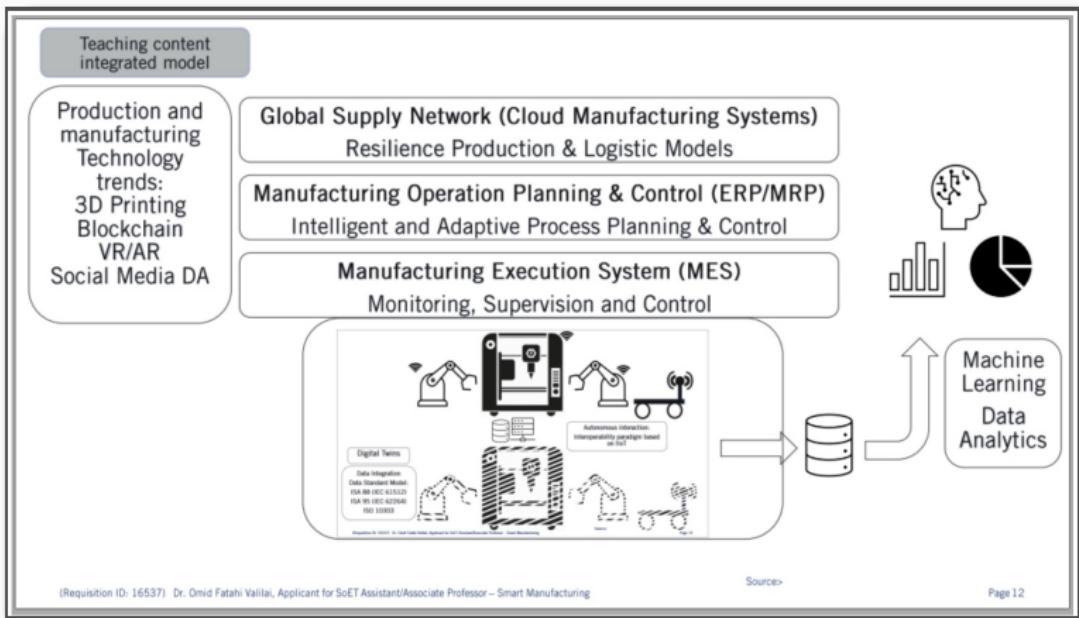


Prof. Dr. Klaudia Brix

Molecular Cell Biology – Biomedicine of Proteolysis

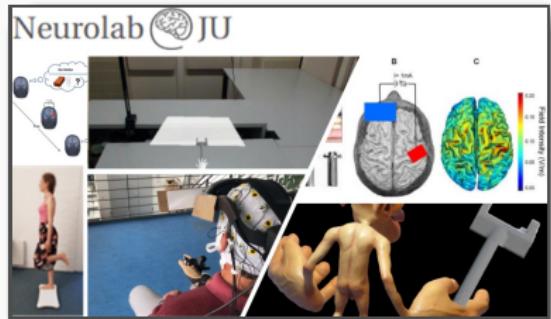


- Computer Integrated manufacturing & Production Network
- Industry 4.0 & Smart systems



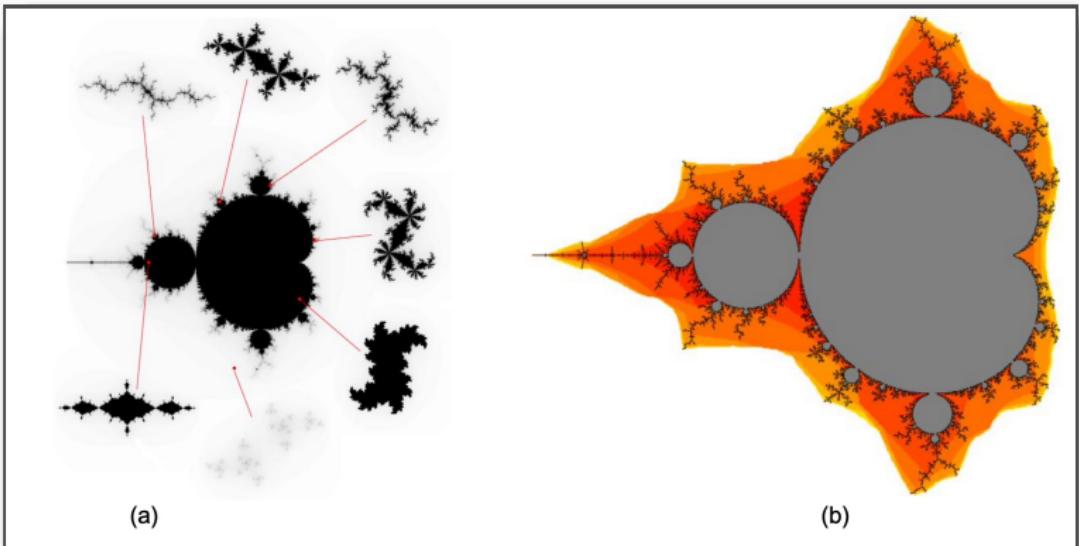
Professor Ben Godde

Professor of Neuroscience



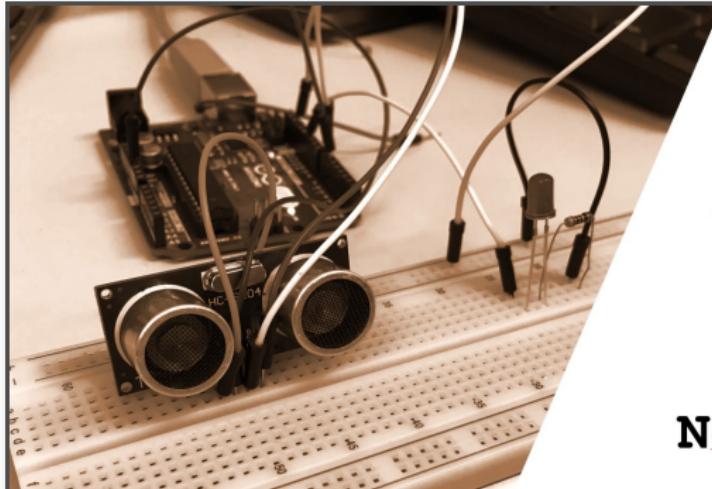
Igors Gorbovickis

Dynamical systems and their relations with complex analysis, ergodic theory and renormalization. I am also interested in some questions from metric geometry.



Fangning Hu

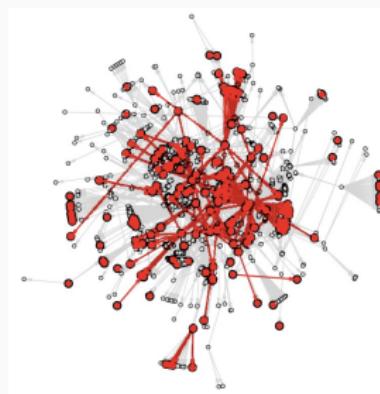
Smart Systems and Sensor Networks



Smart
Systems
and
Sensor
Networks

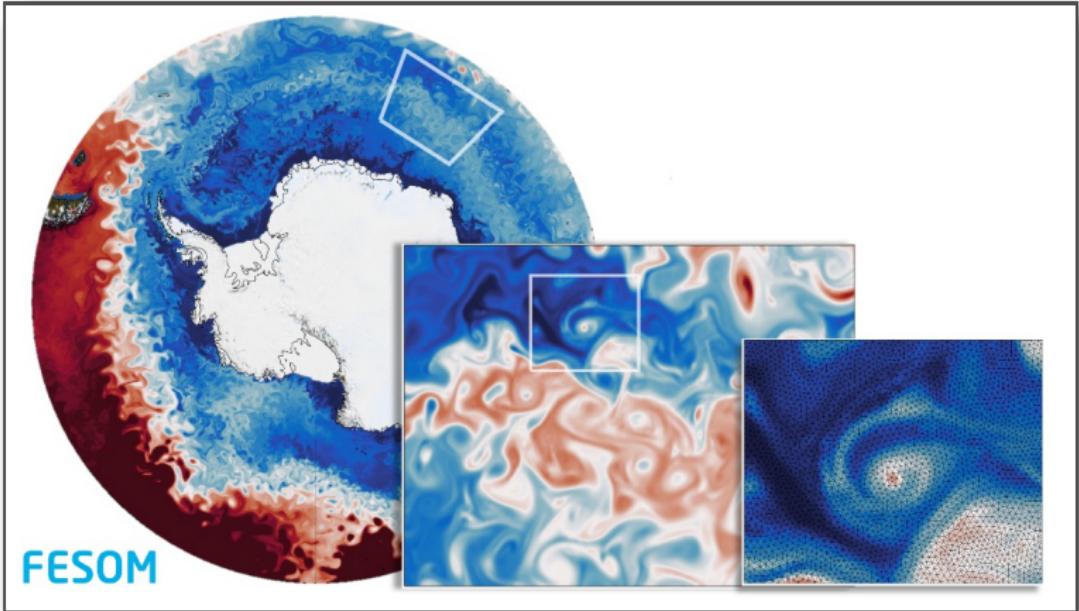
Marc-Thorsten Hütt

Professor of Computational Systems Biology



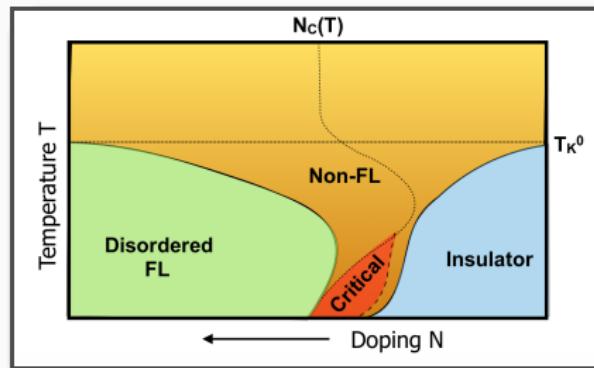
Stephan Juricke

Climate and ocean physics and modelling



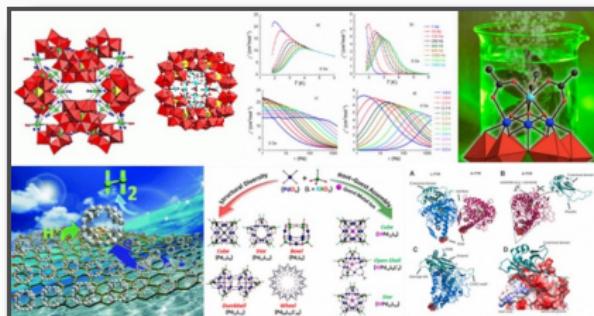
Prof. Dr. Stefan Kettemann

Complex Systems



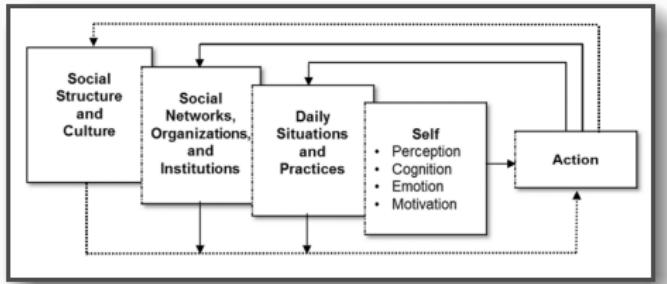
Prof. Dr. Ulrich Kortz

Synthetic inorganic chemistry, metal-oxo clusters, structural chemistry (XRD, NMR), catalysis, biomedicine, materials science



Ulrich Kühnen (speaker), Klaus Boehnke, Franziska Deutsch, Sonia Lippke, and Jan Lorenz

Research Training Group (RTG) "Social Dynamics of the Self"



Prof. Dr. Christoph Lattemann

Business Administration and Information Management

Head of I3 Research Group: Information, Innovation and International Management



Prof. Dr. Alexander Lerchl



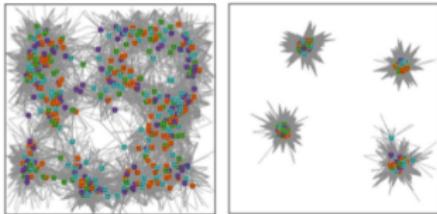
Prof. Dr. Sonia Lippke

Health Psychology and Behavioral Medicine

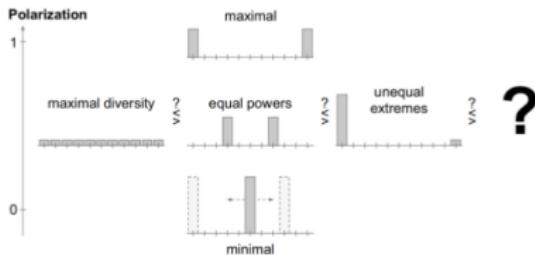


Jan Lorenz

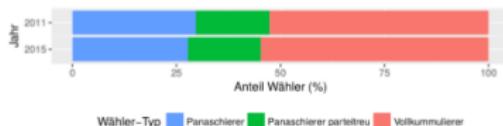
When do **political spaces** evolve like this ↓ or in filter bubbles ↓?



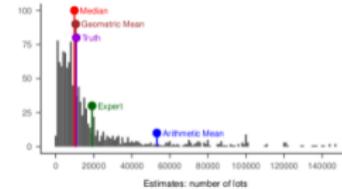
Which attitude distribution is more polarized?



Why do voters in Bremen give their 5 votes as they do?

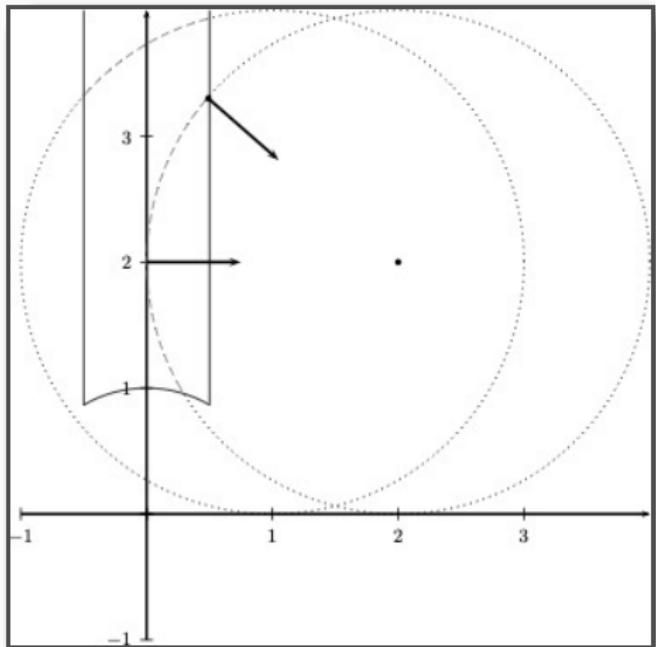


How to aggregate the wisdom of the crowd?



Keivan Mallahi-Karai

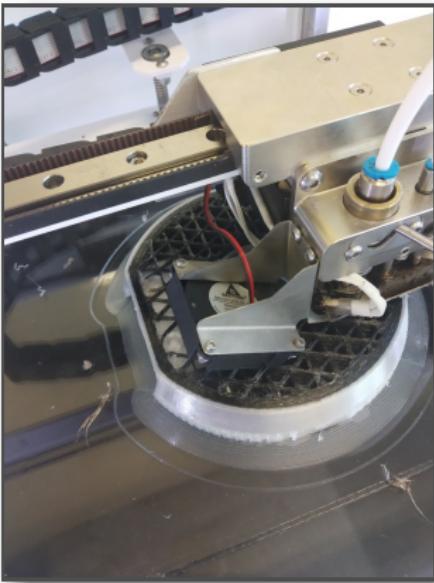
Mathematics, more specifically in the interface between group theory and probability theory.



Prof. Dr. Arnulf Materny (Dr. Patrice Donfack)
Professor of Chemical Physics

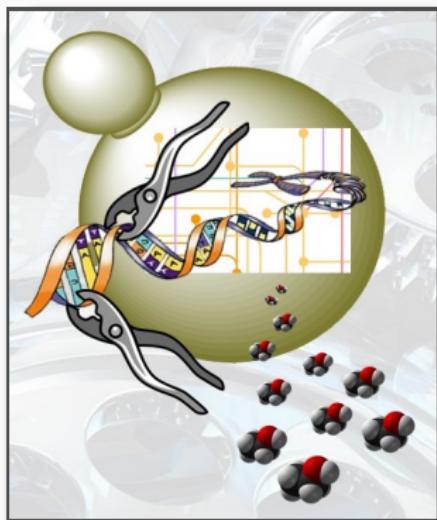


Artem Naumov, Alexander Kochetkov
ANISOPRINT



Elke Nevoigt

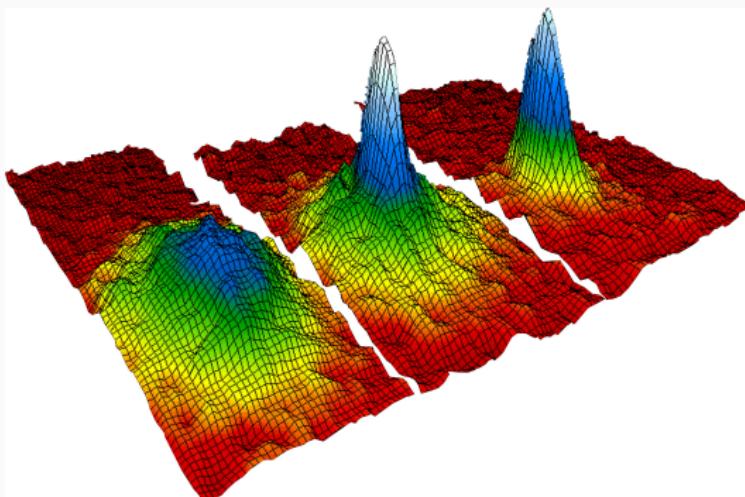
Molecular Biotechnology



Sören Petrat

Mathematical Physics, in particular

- many-body quantum mechanics,
- Bose–Einstein condensates,
- Fermi gases.



Prof. Gerd-Volker Röschenharter (Dr. Volodymyr Kozel)

Basic and Applied Fluorine and Phosphorus Chemistry



Batteries
International Edition DOI: 10.1002/anie.20180381
Copyright © 2019 Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim

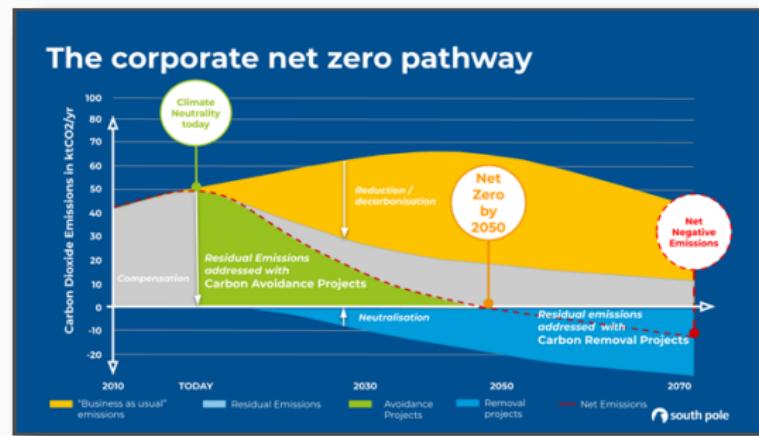
Fluorine and Lithium: Ideal Partners for High-Performance Rechargeable Battery Electrolytes
N. von Arx^a, G.-V. Röschenharter,^b M. Wasse^c and J. Češká-Lavárová^a

Angewandte Chemie International Edition
Volume 58 Number 46 December 2019, pp. 18260–18264
www.angewandte.org

Cover Picture:
Recent Advances in Synthesis of Difluoroethylphosphonates for Biological Applications
M. Shrivastava, G. K. Singh, J. Xu, H. Mei, G.-V. Röschenharter, J. He

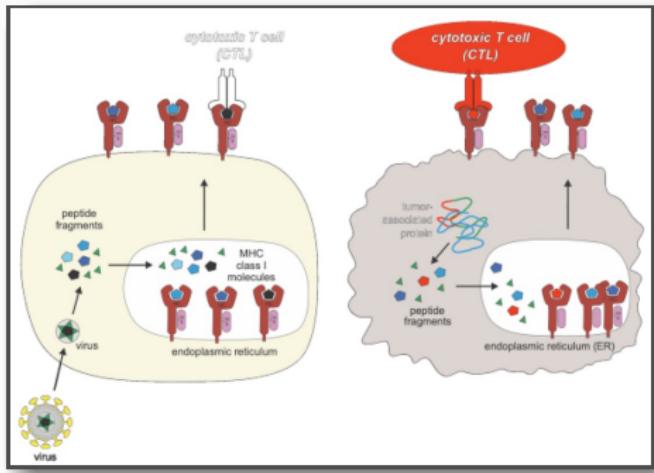
Advanced → Synthesis & Catalysis
12/2021

WILEY-VCH



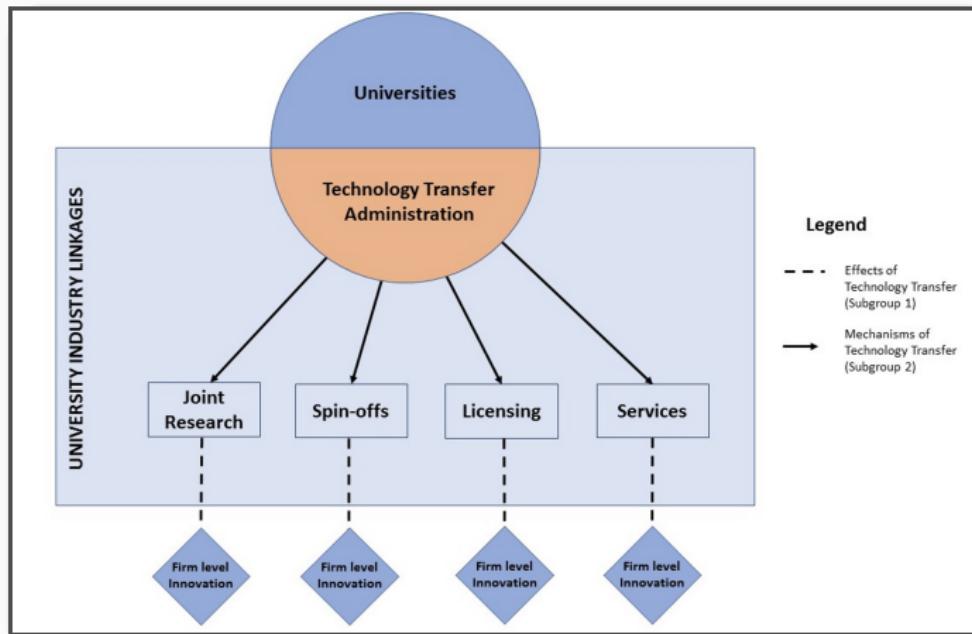
Sebastian Springer

Professor of Biochemistry and Cell Biology



Tobias ten Brink

Professor of Chinese Economy and Society, with a focus on International and Comparative Political Economy



Julia Timpe, PhD

Research Fields:

- Modern European History/ Modern German History
- History of Nazi Germany, World War II & the Holocaust/ History of Everyday Life / Digital History

Prof. Dr. Matthias S. Ullrich

Molecular Microbiology, Marine Microbiology, Plant Microbiology



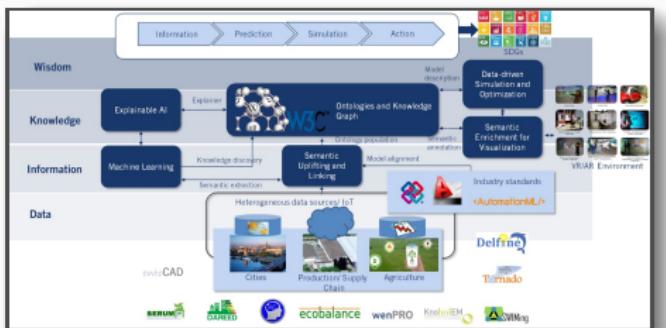
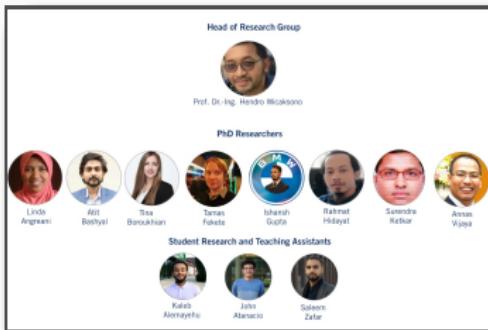
Prof. Dr. Dr.-Ing. Yilmaz Uygun

Logistics Engineering and Technologies Group



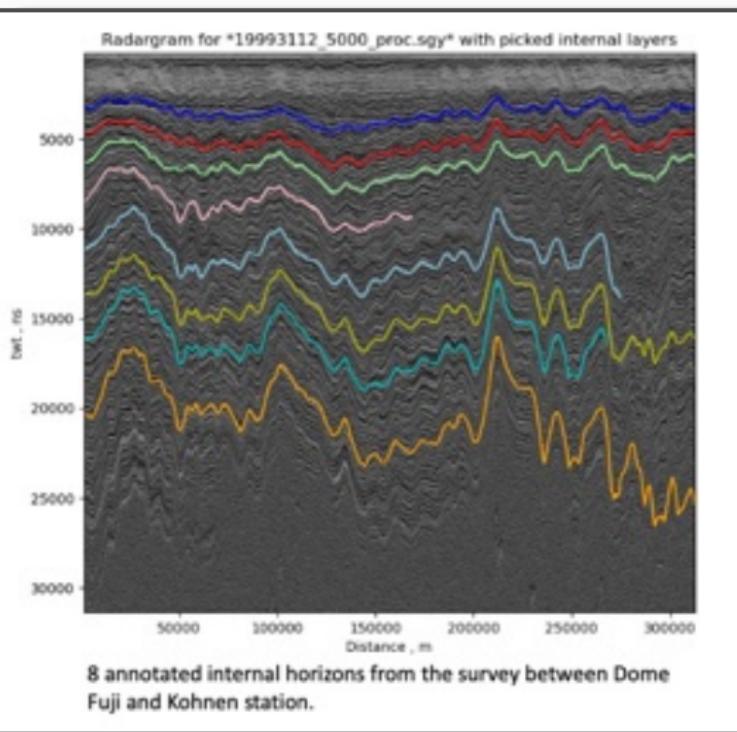
Prof. Dr.-Ing. Hendro Wicaksono

- **Methods:** semantic data integration, explainable artificial intelligence, linked data and knowledge graph, causal inference, machine learning, data-driven simulation and optimization
- **Applications:** supply chain management, smart cities, smart energy systems, agriculture 4.0, sustainability assessment



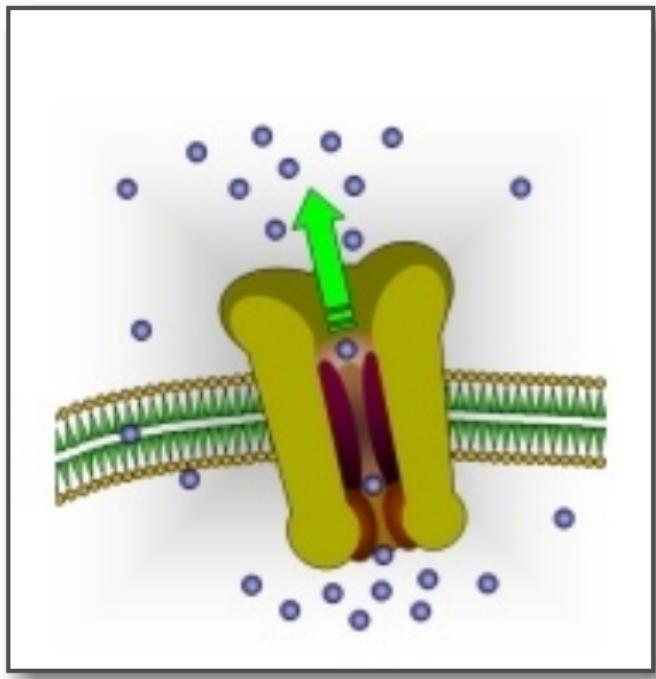
Adalbert Wilhelm

Statistics/Data Science, here particularly: Marine Data Science



Prof. Dr. Mathias Winterhalter

Professor of Biophysics



Open Forum

The Open Forum begins in the IRC Foyer and East Wing.

Coffee: Coffee Bar and Mobile Coffee Bar outside.



Cake/Cookies/Drinks: East Wing.

Tables

- | | |
|--|---|
| 1. Giuseppe Abreu | 17. Sonia Lippke |
| 2. Andreas Birk | 18. Jan Lorenz |
| 3. Klaus Boehnke | 19. Keivan Mallahi-Karai |
| 4. Klaus Boehnke, Franziska
Deutsch, Ulrich Kühnen | 20. Arnulf Materny (Patrice
Donfack) |
| 5. Ulrich Kühnen, Klaus Boehnke,
Franziska Deutsch, Sonia
Lippke, Jan Lorenz | 21. Artem Naumov, Alexander
Kochetkov |
| 6. Klaudia Brix | 22. Elke Nevoigt |
| 7. Omid Fatahi Valilai | 23. Sören Petrat |
| 8. Ben Godde | 24. Gerd-Volker Röschenhaler
(Volodymyr Kozel) |
| 9. Igors Gorbovickis | 25. Andreas Seebeck |
| 10. Fangning Hu | 26. Tobias ten Brink |
| 11. Marc-Thorsten Hütt | 27. Julia Timpe |
| 12. Stephan Juricke | 28. Matthias S. Ullrich |
| 13. Stefan Kettemann | 29. Yilmaz Uygun |
| 14. Ulrich Kortz | 30. Hendro Wicaksono |
| 15. Christoph Lattemann | 31. Adalbert Wilhelm |
| 16. Alexander Lerchl | 32. Mathias Winterhalter |