



# Information for companies

Interdisciplinary programs in the field of logistics resp. supply chain management

28.01.2021

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Technology  
Arts Sciences  
TH Köln

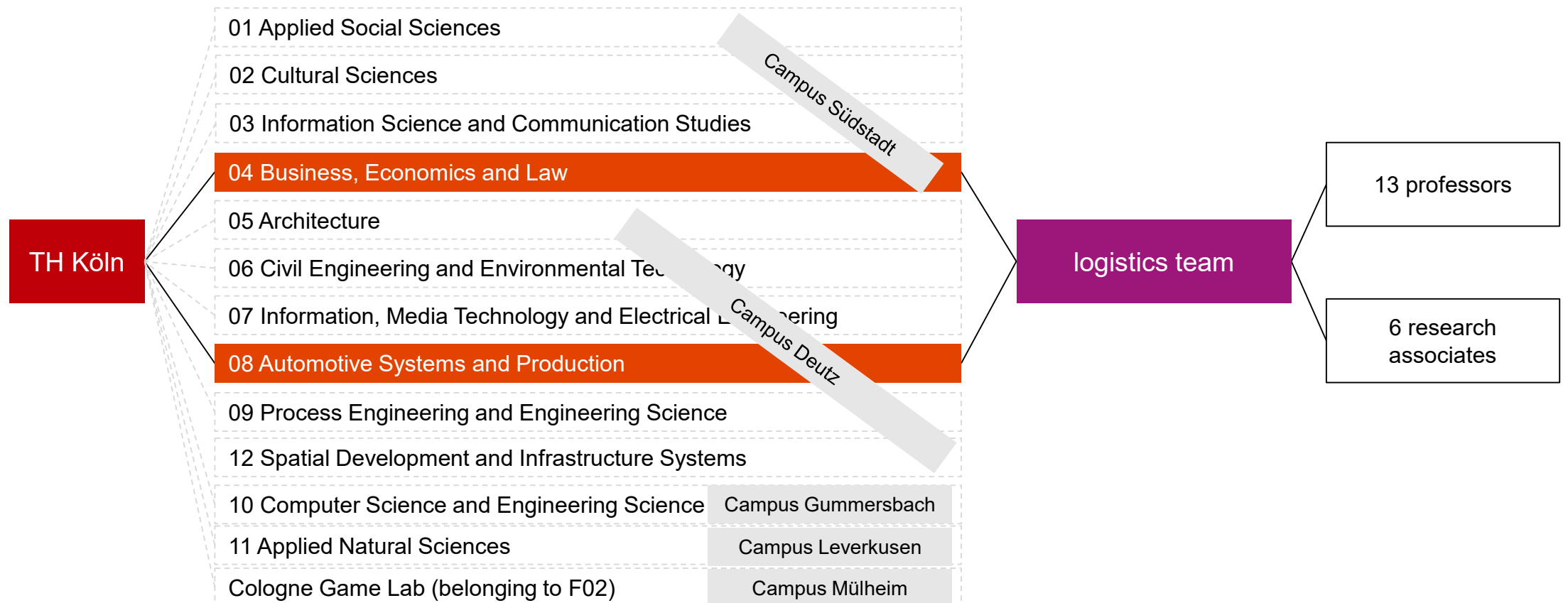


# TH Köln - The largest University of Applied Sciences in Germany

- Established in 1971 as „Fachhochschule Köln“, since 1. September 2015 as „Technische Hochschule Köln“ – short form: TH Köln
- 5 locations
- 11 faculties subdivided in altogether 48 institutes
- More than 90 programs
- 26.000 students
- In total more than 1.800 employees, therefrom 420 professors and 600 research associates

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# The supply chain-expertise of the faculties 04 and 08 is connected in a logistics team



# The logistics team manages two programs ...



Bachelor's program  
Logistics

Logistics team

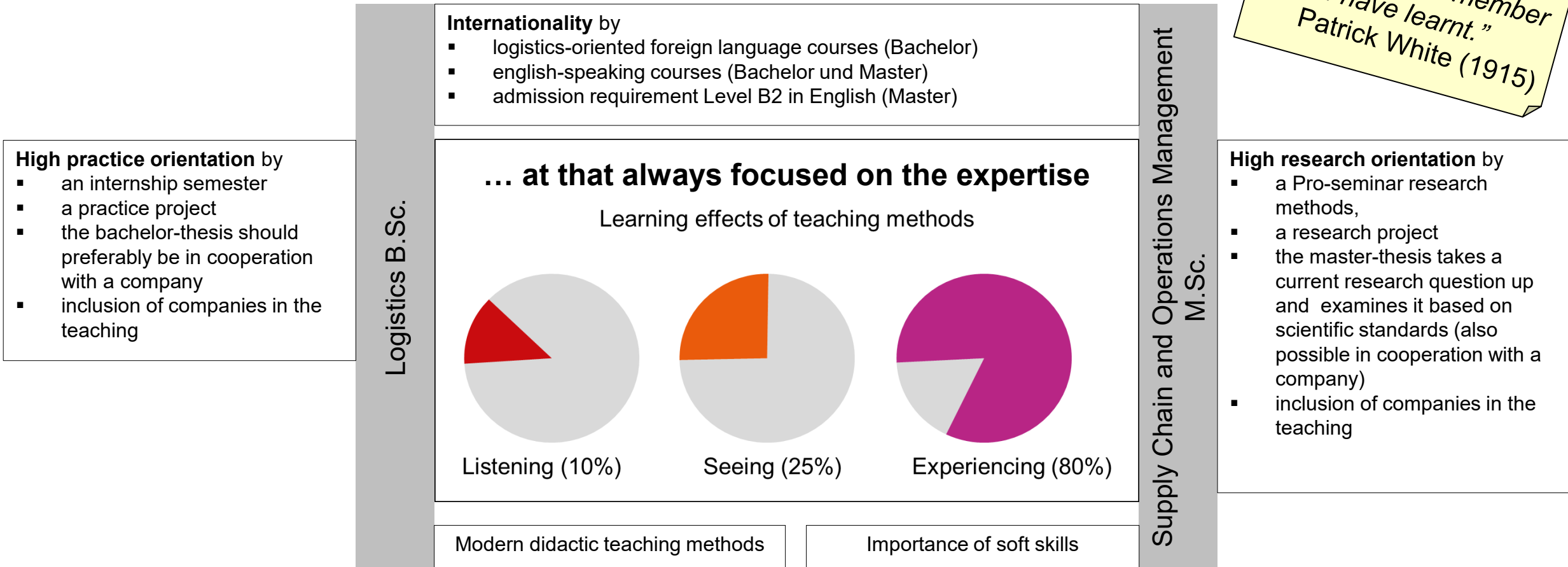


Master's program Supply Chain  
and Operations Management

... and stands in a constantly exchange with the practice.

# The programs in a overview

*"I forget what I was taught. I only remember what I have learnt."*  
Patrick White (1915)



# The bachelor's program integrates current and „timeless“ contents on logistics and supply chain management

Bachelor of Science Logistics	
<b>Degree</b>	Bachelor of Science (B. Sc.)
<b>Program in German</b>	Bachelor of Science in Logistik
<b>Beginning of program</b>	Each winter semester
<b>Planned admission number</b>	60 students
<b>Program duration</b>	7 semester with internship semester
<b>Credits</b>	210 Credit Points
<b>Language of instruction</b>	German
<b>Type of program</b>	Full-time program and classroom instruction
<b>Cooperation degree Engineer / business economics</b>	Faculty of Automotive Systems and Production (F08) Faculty of Business, Economics and Law (F04)

Obligatory modules, for example:

Quantitative Methods Transport Logistics Logistics Marketing  
**English** Conflict Management and Negotiation Techniques Procurement  
 Logistics Productions Logistics **Distribution Logistics** Logistics IT und ERP-  
 Systems **Logistics Controlling** Communication and Presentation Techniques  
 Outsourcing Project Management **Methods of Business Modelling**

Optional modules, for example:

**Green Logistics** Production Planning and Controlling Logistics Consulting  
 Traffic Logistics **Planning of Logistics Centers** Quality Management  
**Customs and International Trade Law** Disposal Logistics  
 Essentials of Service Marketing and Management

# Based on this relevant previous knowledges the professional and methodical competence becomes intensified and extended by the Master's program

## Master of Science in Supply Chain and Operations Management

<b>Degree</b>	Master of Science (M. Sc.)
<b>Program in German</b>	Master of Science Supply Chain and Operations Management
<b>Beginning of program</b>	Each summer semester
<b>Planned admission number</b>	30 students
<b>Program duration</b>	3 Semester
<b>Credits</b>	90 Credit Points
<b>Language of instruction</b>	German and English
<b>Type of program</b>	Full-time program and classroom instruction
<b>Cooperation degree Engineer / business economics</b>	Faculty of Automotive Systems and Production (F08) Faculty of Business, Economics and Law (F04)

Obligatory modules, for example:

Supply Chain and Operations in Research and Practices  
Pro-seminar Research Methods Management of Supply Chain Relations  
Sustainable Technical Solutions in Logistics Operations Research  
Management Areas and Management (Support) Functions of Logistics Providers  
Strategic Supply Chain Management and Logistic Networks Process Management  
IT-systems in Logistics and in Supply Chain Management

Optional modules, for example:

Branch-specific supply chain and operations management  
Insurance in logistics and customs and international trade law

# The cooperation opportunities

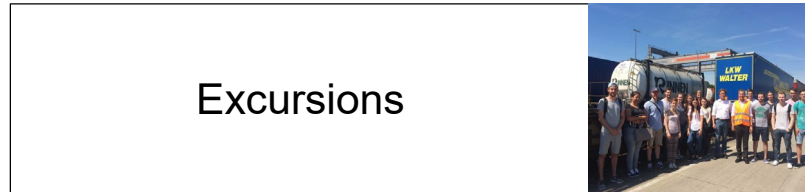
Cooperation can be realized on a case-by-case basis or based on a long term agreement.



Guest lectures/Case Studies



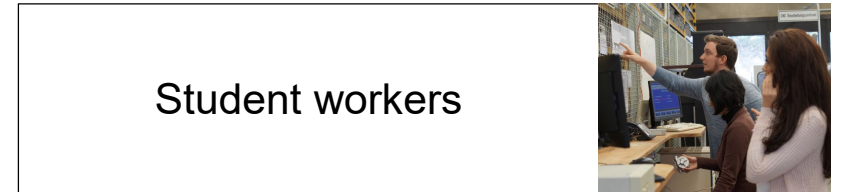
Internships



Excursions



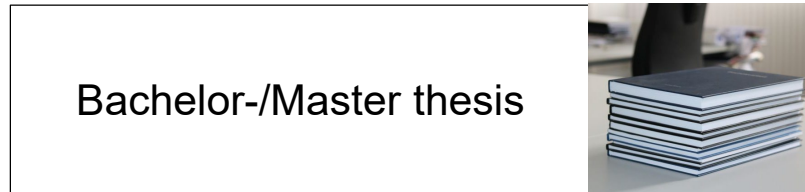
Practice projects



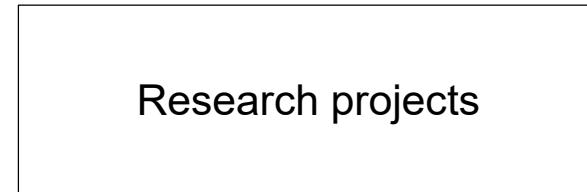
Student workers



Topic evenings/  
Symposiums/Conferences



Bachelor-/Master thesis



Research projects

# The cooperation opportunities - description

## **Practice projects**

Processing a practice-oriented task within team.

Result: written documentation (10 – 15 pages per participant) + presentation

Extent: per participant 12 ECTS (ca. 360 h per participant)

Group size: 2 – 4 students

Duration: max. 6 months

## **Internship**

Skills, which are acquired at university, are to reflected and applied in a company.

Result: internship report (min. 20 pages)

Extent: 30 ECTS

Duration: 22 weeks

## **Topic evenings/Symposiums/Conferences**

Subject-specific and personal exchange between science, economy, chambers, organizations and municipalities .

For example: VISION.LOGISTIK. in cooperation with the „Cologne Chamber of Commerce and Industry“ (IHK zu Köln) and the expert advice „HERZIG Marketing Kommunikation GmbH“

Link: [www.vision-logistik.de](http://www.vision-logistik.de)

# Bachelor curriculum I (PO2)

Areas of competence and Modules	1. Se.	2. Se.	3. Se.	4. Se.	5. Se.	6. Se.	7. Se.	
	CP	CP	CP	CP	CP	CP	CP	CP
<b>Basics in business administration and economics</b>	12	12	6	6	12	0	0	48
Business administration	6							6
Accounting	6							6
Private law			6					6
Marketing		6						6
Business organization		6						6
Logistics controlling			6					6
economics				6				6
<b>Quantitative methods</b>	6	6	6	0	0	0	0	18
Quantitative methods I: mathematics	6							6
Quantitative methods II: statistics		6						6
Quantitative methods III: planning and decision			6					6
Quantitative methods IV: optimization					6			6
<b>Logistics management</b>	6	6	12	12	12	0	0	48
<b>Processes and functions</b>								
Fundamentals in logistics	6							6
Transport logistics		6						6
Outsourcing							6	6
<b>Information management</b>								
Logistics IT und ERP-systems					6			6
Methods of business modelling				6				6
<b>Phase-specific specialization</b>								
Distribution logistics			6					6
Productions logistics				6				6
Procurement logistics					6			6

# Bachelor curriculum II (PO2)

<b>Logistics management (mandatory modules)</b>	0	0	0	6	0	0	6	12
Service Marketing and Management				1 x 6 CP				6
Introduction to international logistics								
Logistics consulting								
Planning of logistics centers								
Traffic logistics								
Customs and international trade law								
Green logistics								
mobility module*								
Disposal logistics							1 x 6 CP	6
Fundamentals of production planning and controlling								
Quality management								
Capital budgeting								
Multivariate data analysis								
Technical systems and digitization								
mobility module*								
<b>Soft Skills development and management techniques</b>	6	6	6	6	0	0	3	27
English I								6
Economy	3							
Accounting and finance		3						
English II								6
Sales and marketing			3					
Logistics				3				
Project management								6
Project management I	3							
Project management I		3						
Social skills								6
Communication and presentation techniques I			3					
Communication and presentation techniques II				3				
Conflict resolution and negotiation techniques							6	6
<b>Internship</b>						30		30
<b>Case studies in logistics management</b>	0	0	0	0	12	0	0	12
Project					12			12
<b>Bachelor thesis</b>	0	0	0	0	0	0	12	12
<b>Bachelor thesis</b>							12	12
<b>Credit Points (CP)</b>	30	30	30	30	30	30	30	210

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# Master curriculum

Areas of competence and modules	1. Se.	2. Se.	3. Se.	
	CP	CP	CP	CP
<b>Supply chain and operations management - strategy</b>	6	6	0	12
Strategic supply chain management and logistic networks	6			6
Sustainable technical solutions in logistics		6		6
<b>Supply chain and operations management – processes and methods</b>	12	0	0	12
Operations research	6			6
Process management	6			6
<b>Supply chain and operations management - systems</b>	0	6	0	6
IT-systems in logistics and in supply chain management		6		6
<b>Resources management in supply chain</b>	6	6	0	12
Management areas and management (support) functions of logistics providers	6			6
Management of supply chain relations		6		6
<b>Research</b>	6	6	0	12
Pro-seminar research methods	6			6
Supply chain and operations in research and practices		6		6
<b>Mandatory modules (one of them has to be chosen)</b>	0	6	0	6
Branch-specific supply chain and operations management		6		6
Insurance in logistics and customs and international trade law		6		6
<b>Master thesis</b>	0	0	30	30
<b>Master thesis</b>			26	26
<b>Colloquium</b>			4	4
<b>Credit Points (CP)</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>90</b>

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# Cooperation opportunities - timetable

Theory-practise-interaction-calendar logistics team - TH Köln

	2021												2022												2023																
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12					
Guest lectures/ Case Studies			4 - 6						6 - 9						4 - 6						6 - 9						4 - 6														
			2. a. 4. Sem						1. 3. 5. a. 7. Sem						2. a. 4. Sem						1. 3. 5. a. 7. Sem						2. a. 4. Sem														
Excursions			3 - 6						3 - 6						3 - 6						3 - 6						3 - 6														
			2. a. 4. Sem						1. 3. 5. a. 7. Sem						2. a. 4. Sem						1. 3. 5. a. 7. Sem						2. a. 4. Sem														
Practise projects (max. 6 months)									15 projects													15 projects													30 projects						
									5. Sem													5. Sem													5. Sem						
Bachelor thesis (max. 13 weeks)									60 theses													60 theses													60 theses						
									7. Sem													7. Sem													7. Sem						
Internship (22 weeks)				60 places											60 places													60 places													
				6. Sem											6. Sem													6. Sem													
Master thesis (max. 5 months)				30 theses												30 theses													30 theses												
				3. Sem												3. Sem													3. Sem												
Student workers																																									
Topic evenings/ Symposiums/ Conferences																																									
Research projects																																									

<b>Legend:</b>	
	Intended period in the curriculum
	Optional/individual agreement
e. g. 2 - 3	amount (expected)

# Logistics team

## Professors

Prof. Dr. Helmut Abels

Prof. Dr. Zelal Ates

Prof. Dr. Stephan Freichel

Prof. Dr. Kathrin Hesse

Prof. Dr. Marc Kastner

Prof. Dr. Thomas Krupp

Prof. Dr. Michael Lorth

Prof. Dr. Rainer Pusch

Prof. Dr. Hartmut Reinhard

Prof. Dr. Helmut Schulte Herbrüggen

Prof. Dr. Tom Tiltmann

Prof. Dr. Franz Josef Weiper

Prof. Dr. Christian Zoller

## Research Associates

Christopher Köhne, M.Sc.

Wladimir Rempel, M.Sc.

Pia Rütten, B.Sc.

Andrea Vialaneix, B.Sc.

Anke Vollmer, M.A.

Johannes Wörtge, M.Sc.