



higher education policy

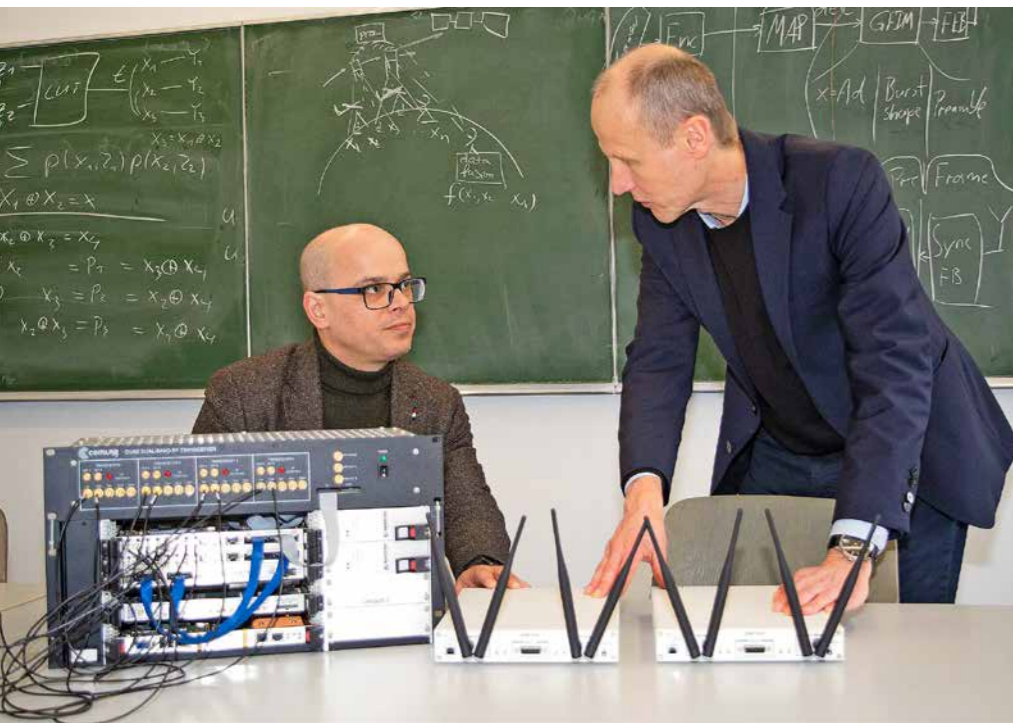
Guest Professorships for Top Researchers

With the U Bremen Excellence Chairs, University and MARUM are breaking new ground in international cooperation

Exciting transnational projects, fresh ideas, totally new forms of cooperation: The university and MARUM – Center for Marine Environmental Sciences have created a new format of international cooperation – the U Bremen Excellence Chairs. In the future, selected experts from all over the world are to do research as visiting professors together with their colleagues in Bremen. The expertise of both sides will merge into new projects focusing on the specialized issues of the respective research disciplines. The first seven chairs have now been occupied, more are to follow.



An animated exchange is pre-programmed: Professor Ingo Warncke, visiting professor Shalini Randeria (center) and professor Michi Knecht.
Photo credit: Kai Uwe Bohn / University of Bremen



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Subject "Data exchange among small satellites": Professor Petar Popovski (left) from Aalborg and professor Armin Dekorsky from Bremen are now working even more closely together. Photo credit: Kai Uwe Bohn / University of Bremen

Two men, a blackboard – and an animated discussion: Professor Petar Popovski, one of the most regarded wireless communication experts is talking with his colleague Armin Dekorsky about the objectives of their future cooperation. Both intend to develop new communication technologies for networked small satellites, which are soon to become part of the so-called New Space era. The latter will be important for future internet applications – for example, the “Internet of Things”, interference-free streaming, or the high-frequency trading of bankers. The safe data streams of today and tomorrow are based on the research of the working groups of communication theorist Petar Popovski and signal theorist Armin Dekorsky. Both have already been working together for quite a while. Thanks to the Excellence Chair at the university, they now got an ideal cooperation platform to make even better progress together.

Professor Shalini Randeria – a highly regarded social anthropologist and sociologist, who is the director of renowned institutes in Vienna and Geneva – has also already begun with her work as U Bremen Excellence Chair guest professor. In the scope of the research platform “Worlds of Contradiction”, for which the humanities and social, cultural and legal sciences have joined forces, she now works closely

together with researchers surrounding Professor Michi Knecht and Professor Ingo Warncke. For at least six weeks per year, Shalini Randeria will be in Bremen, direct research projects, organize summer schools and engage in an intensive exchange of knowledge and ideas with her colleagues. In the meantime, she will be present by regularly held video conferences, for which the research platform even intends to equip a special room to enable stable broadcasts of high quality. The thematic core of the research group she established in Bremen is “Soft Authoritarianisms” in all their facets: processes of insidious, systematic transformation of democratic institutions to authoritarian regimes, for example, in the eastern European countries, in India, and in Turkey.

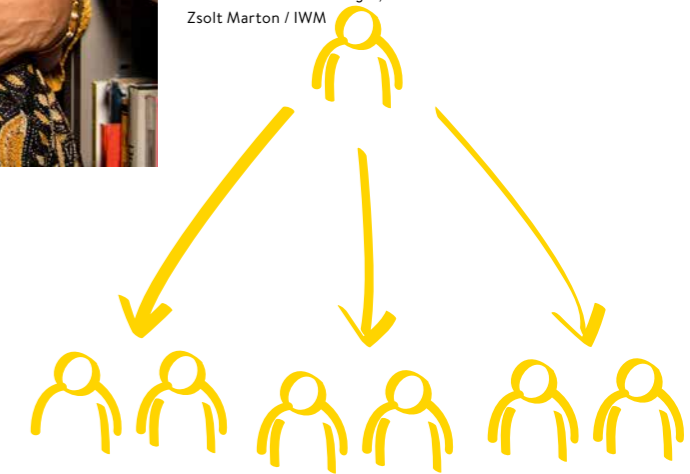
Boost for International Cooperation

President Bernd Scholz-Reiter is happy about the international top researchers who are coming to the university because of the Excellence Chairs. “This measure will give research in Bremen and our international cooperation another great boost,” he is convinced. “We are associating with very successful researchers from other countries, who



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Prof. Dr. Shalini Randeria is President of the Institute for Human Sciences in Vienna and Professor of Social Anthropology and Sociology at the Graduate Institute of International and Development Studies in Geneva, where she also manages the Albert Hirschman Centre on Democracy. In Bremen, she is building a research group on the subject of “Soft Authoritarianisms” in the scope of the interdisciplinary research platform “Worlds of Contradiction” (WoC) at the interface of cultural sciences, social sciences, and law. The processes of insidious, systematic transformation of democratic institutions are examined in case studies.

Photo credit: Klaus Ranger, Zsolt Marton / IWM



“This measure will give another great boost to research in Bremen and our international cooperation”

President Bernd Scholz-Reiter

The Excellence Chairs are also entitled to supervise doctoral theses at the University of Bremen.

Prof. Dr. Jack Middelburg

is Professor for Geochemistry at the University of Utrecht and Research Institute Director. His research interest is centered on the interface between environmental sciences, biogeochemistry and geosciences. As U Bremen Excellence Chair at MARUM–Center for Marine Environmental Sciences of the university he will explore topics related to the marine carbon cycle, both experimentally and theoretically. One special focus: How is carbon transported through the water column, from the light-flooded zone down to the deep sea and ultimately in the ocean floor–the habitat of the deep biosphere?

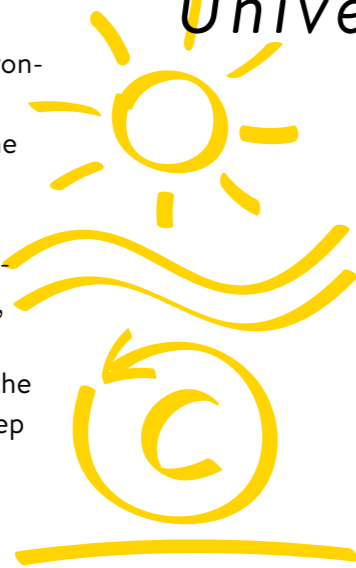


Photo credit: Ulrike Prange / MARUM



are working in highly interesting fields, and intensifying our professional cooperation. Both sides will benefit from the networks of all involved.”

The Cluster of Excellence “The Ocean Floor – Earth’s Uncharted Interface” of MARUM–Center for Marine Environmental Sciences also establishes three marine science Excellence Chairs. “We have succeeded in including internally leading researchers active in the fields of marine biogeochemistry, geomicrobiology, and the analysis of so-called ‘old’ DNA into our ocean floor research,” says MARUM director Professor Michael Schulz. “This will complementarily strengthen our cluster professionally and excellently increase its international network at the same time.”

1.5 Million per Year for Each Chair

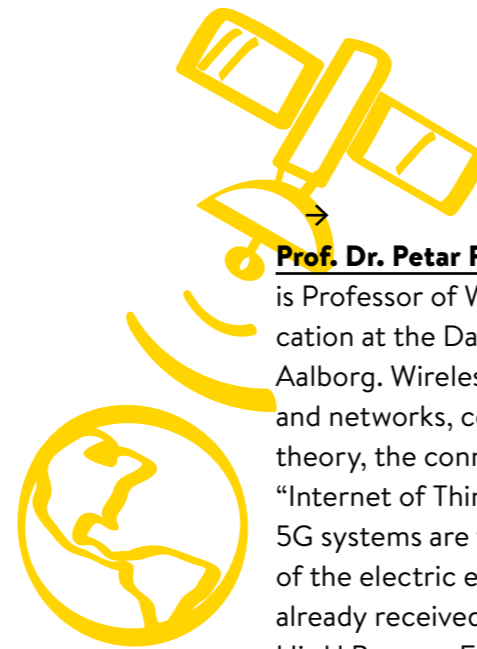
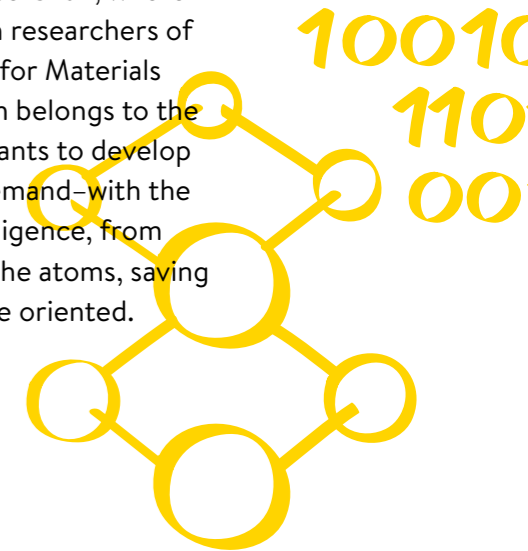
The U Bremen Excellence Chairs are financed by the “university flat rate” of 1 million euros per annum which the University of Bremen will receive from 2019 to 2025 in the scope of the excellence strategy of Germany’s federal and state governments. These funds were granted to the university in addition to MARUM’s successful cluster application. The state of Bremen will enhance these funds by adding another 500,000 euros per year. “With it, the universities who have proven successful in the Excellence Cluster competition are also expected to expand strategically in width,”



Prof. Dr. Nicola Marzari

is holder of the Chair “Theory and Simulation of Materials” at the Swiss École Federale Polytechnique de Lausanne (EPFL) and one of the most prominent material scientists worldwide. At the EPFL, he heads the MARVEL Excellence Center for Computer-aided Design and the Discovery of novel materials. At the U Bremen Excellence Chair, where he collaborates with researchers of the MAPEX Center for Materials and Processes which belongs to the university, Mazari wants to develop new materials on demand–with the aid of artificial intelligence, from the perspective of the atoms, saving resources and future oriented.

Photo credit: Harald Rehling / University of Bremen



Prof. Dr. Petar Popovski

is Professor of Wireless Communication at the Danish University of Aalborg. Wireless communication and networks, communication theory, the connectivity of the “Internet of Things” and wireless 5G systems are the core subjects of the electric engineer who has already received multiple awards. His U Bremen Excellence Chair is integrated into the Cluster Initiative “Advancing Earth Observation Science” (AEOS) of the University. The objective of the research group is to improve the data transmission between small satellites and earth by using modern methods of machine learning.

Photo credit: Kai Uwe Bohn / University of Bremen





Prof. Dr. Haizhou Li

is Professor at the Department of Electrical and Computer Engineering and the Department of Mechanical Engineering of the National University of Singapore. As a U Bremen Excellence Chair, he will head a research program of the high-profile research area “Minds, Media, Machines” at the University of Bremen, having to do with modelling, implementing and verifying a biologically inspired auditory model for machine listening which matches human hearing ability. In this context, Professor Li will set up the “Machine Listening Laboratory” and collaborate closely with information technologist Professor Tanja Schultz at the Cognitive Systems Lab.

Photo credit: Private



says Fabian Heuel from the Staff Unit for Strategic Initiatives. “As these are so-called ‘free strategy funds’, they can be applied at will. We decided for a total of eight Excellence Chairs, MARUM-financed with cluster support funds – for three Chairs.”

The guest professorships are geared to the long term and each will last for at least four years. Two posts for young scientists will also be financed for each guest. Bremen’s research group can also be upgraded and expanded using other funds. The Excellence Chairs are closely integrated into Bremen’s professional structures and are also entitled to supervise doctoral theses here.

Seven Excellence Chairs have by now been started at the University of Bremen and MARUM. Four more will be established in the course of this year. \ KAI UWE BOHN

Homepage of the university referring to the Excellence Chairs:
<http://unihb.eu/3dj7qZ4Y>

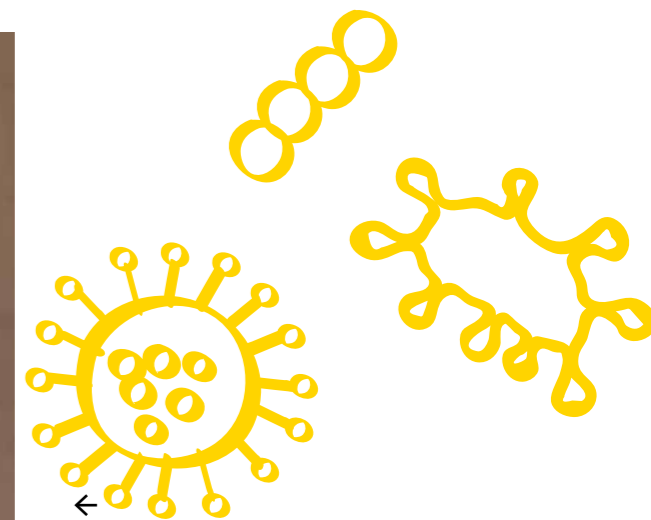
Homepage of MARUM referring to the Excellence Chairs:
<http://unihb.eu/SfdVMHoM>



Prof. Dr. Eske Willerslev

is Professor and Director of the GeoGenetics Institute at the University of Copenhagen and Prince Philip Professor for Ecology and Evolution at the University of Cambridge. He is regarded as a pioneer in applying fossil DNA analyses to paleo-environmental studies. Together with his colleagues working in the Cluster of Excellence “The Ocean Floor – Earth’s Uncharted Interface” at MARUM – Center for Marine Environmental Sciences of the university, he now wants to explore the fossil DNA archive in marine deposits.

Photo credit: University of Copenhagen



Prof. Dr. Victoria Orphan

is Professor of Environmental Science and Geobiology at the California Institute of Technology. Among her research topics are microbial communities involved in the carbon, nitrogen and sulfur cycles. In the Cluster “The Ocean Floor – Earth’s Uncharted Interface” at MARUM – Center for Marine Environmental Sciences, Orphan is going to expand her research in cooperation with members of MARUM. A novel understanding of the dynamic transformation of carbon, nitrogen and sulfur compounds in microbial communities is to be developed with the aid of highly modern analytical facilities and deep-sea instruments unique in Bremen.

Photo credit: California Institute of Technology