

# The Information-, Communication- and Mediacenter / Das Informations-, Kommunikations- und Medienzentrum (ICMC / IKMZ) of Brandenburg Technical University of Cottbus

Seminar of the LIBER Architecture Group  
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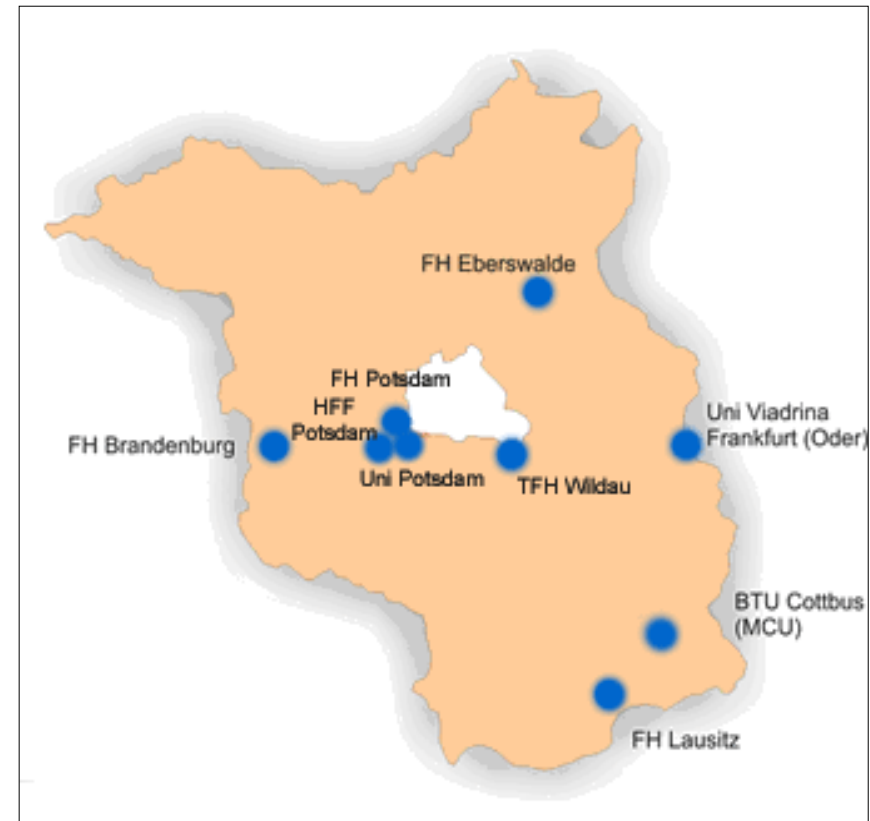
- Founded in 1991 the university is the only technical university in the state of Brandenburg
- Around 5.000 students, about 25 % students from foreign countries
- 4 faculties with 130 professors and 24 curricula (BA/MA)

**Faculty 1: Informatics, mathematics and physics,**

**Faculty 2: Architecture, civil engineering, urban development,**

**Faculty 3: Engineering, electrical engineering, economics,**

**Faculty 4: Environmental engineering, process engineering**



# The Concept of IKMZ/ICMC

- With the founding of the ICMC/IKMZ at the beginning of 2004 the library, the multimedia center, the computer center and administrative data processing were brought together under a single management which covered both the budget and staff responsibilities for the areas mentioned. With this consistent integration model the BTU Cottbus is one of the few universities in Germany which have, up until now, decided to follow this path.
- The heart of the ICMC/IKMZ is the new building in which the library and the multimedia center are housed; the areas of 'operational data processing' and 'computing center' – also belonging to the IKMZ/ICMC - are not housed in the ICMC/IKMZ but at their different locations on the university campus.

# Building at daytime (1)



Informations-, Kommunikations-  
und Medienzentrum





## Building at daytime (2)



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# Description of the outside (1)

- The architecturally imposing and, at the same time, functionally oriented building was designed by the Swiss architects Herzog & de Meuron and finished, after a three year construction phase, in November 2004.
- The building, which stands in the eastern part of the BTU site between the University and the city, is a 32 meter high rein-forced concrete construction covered by a double-shell, glass facade embossed with stylized graffiti.
- Costs: € 28 Mio (building), € 1,9 Mio (furniture and equipment), € 2 Mio (site incl. fees)

# The building and the campus



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# Building at night (1)



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# The facade



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## Description of the outside (2)

- The ground plan of the building has a curved outline resembling a clover leaf which does not explicitly have front and back sides.
- The main useable area is 7,630 m<sup>2</sup> - 5,461 m<sup>2</sup> for public use, 976 m<sup>2</sup> for the administration, 1,193 m<sup>2</sup> for the closed stacks.





# Building at night (2)



Informations-, Kommunikations-  
und Medienzentrum



# Description of the Inside

- Altogether the new building has more than 700 working places available (622 for users, 78 for staff). The user work stations are divided into 490 networked reader stations for notebook use, 100 public PCs, 61 pool stations, 54 research stations and 15 carrels.
- The public PC-facilities will be enlarged by around 100 work stations (diskless pc-stations) in the beginning of 2006.
- The amazing external architecture continues internally with a spiral staircase extending from the 1st to the 6th floor, and a striking color scheme (in vibrant yellow, green, magenta, red, and blue) for parts of the floor covering and walls.





# Groundfloor - Servicecounter



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Deutschland  
Land der Ideen



Ausgewählter Ort 2006



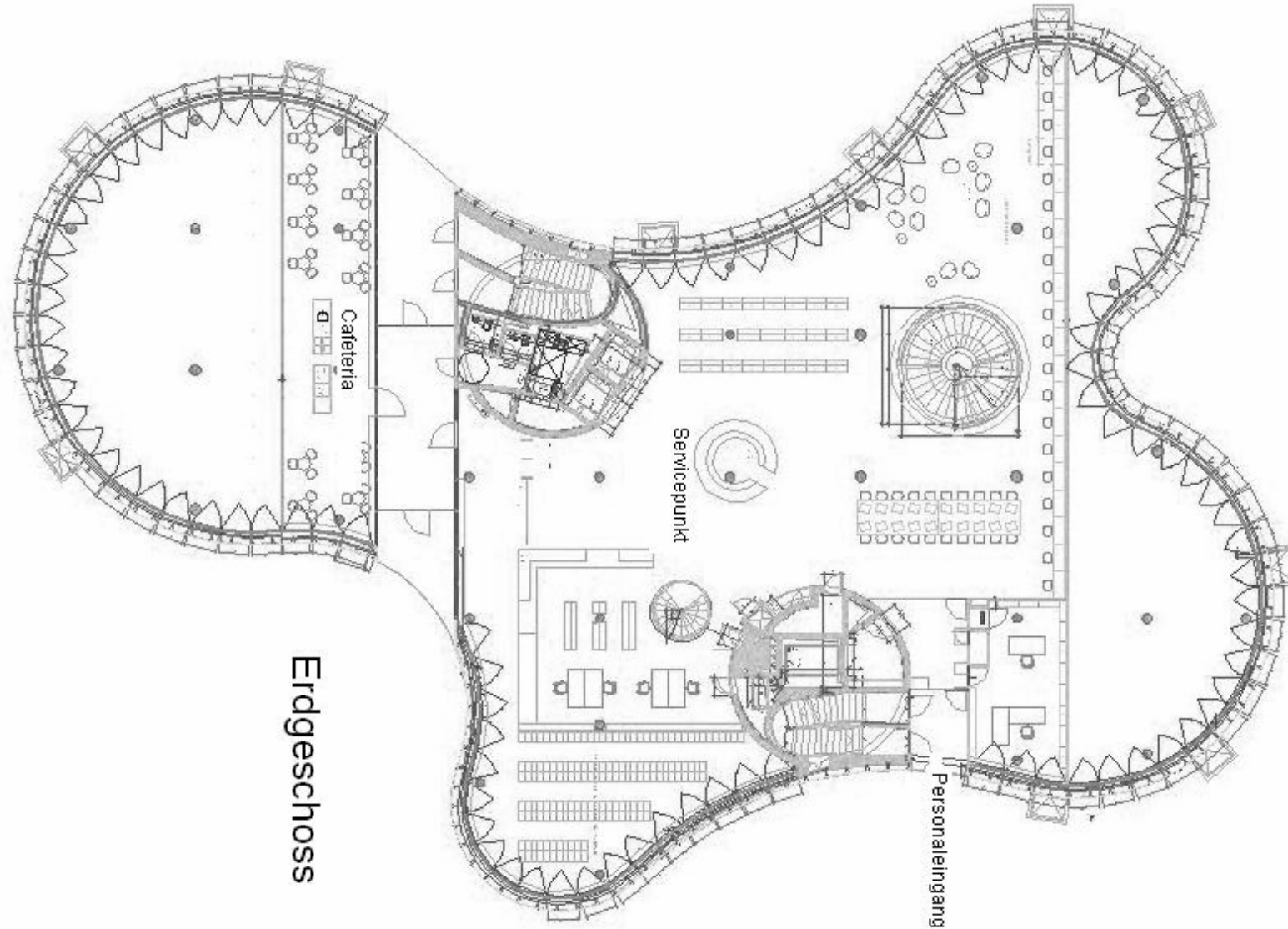
*wissen auf allen ebenen*



# The Service Facilities (1)

- The library, with its underground stacks and the specialized libraries distributed over 6 floors (800.000 Volumes in total), is the focal point of the building's use:
- The individual specialized libraries are distributed over the various floors as follows with open stacks (ca. 500.000 Volumes = 80% of the total collection): Special library 1: Bibliographies, encyclopedias, economical and legal sciences (1st underground level and 2nd floor); Special library 2: Architecture, Civil Engineering, Technology (3rd and 4th floor); Special library 3: Natural and environmental sciences, informatics (5th and 6th floor).
- The multimedia center (e-learning, multimedia production) occupies the 1st floor by itself. On the ground floor, there is a lending desk, a service counter for all services of the ICMC/IKMZ and an exhibition area.

# Ground Plan: Ground Floor





# 2nd Floor - Staircase





# The Service Facilities (2)

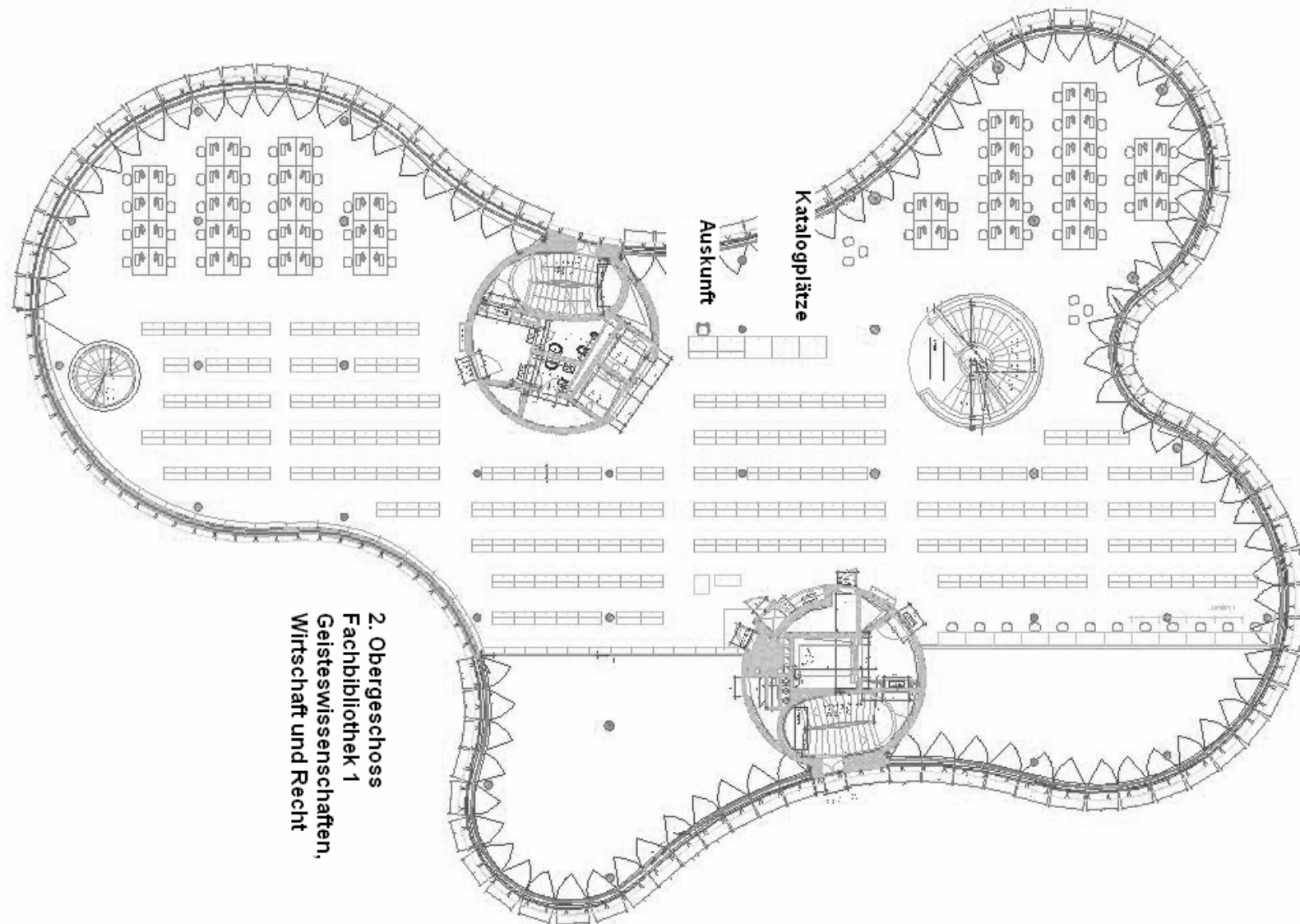


- In addition, on their appropriate floors, are the individual helpdesks of the specialized libraries as well as printing, copying, and scanning stations.
- Moreover, in the 1st underground level, pool and presentation rooms provide various possibilities for multimedia functions. In the 2nd underground level those stacks are located, which are closed for the public.

# Ground Plan: 2nd Floor



Informations- Kommunikations-  
um



2. Obergeschoss  
Fachbibliothek 1  
Geisteswissenschaften,  
Wirtschaft und Recht

# Staircase



Informations-, Kommunikations-  
und Medienzentrum



# Working and Reading Areas

- In addition a further characteristic of the building is that within the ground plan none of the floor plans are the same.
- With the exception of the management and business areas on the 7th floor and the technical and pool areas in the two underground levels there are only a few truly separate areas.
- This allows a flexible and open concept for the use of the building which consciously allows for many work and communication forms for single users or user groups. How these will combine with each other, practice will show.
- The work and reading areas are in coves related to each of the floors, while the open access stacks of the library - floor related - arranged according to subject areas are located in the core of the building.



# Building in usage (1)



# The Network

- An important precondition for the supply structure in the new building is the network based access system. This is a modern, high capacity system based on a complete glass fiber infrastructure from the center to the individual workstations.
- The active technology used, the 'Motor of the Network', has a maximum transfer rate of 2x70 million data packets per second in routing processes or, in other words, 256 Gbit/s backplane bandwidth. The modular and fail safe chassis have enough space and performance reserves to supply the server for the library and multimedia center, and the numerous workstations and research computers. It can activate and supply ca. 920 ports (connections), each with 10/100 Mbit/s, or 420 ports, each with 1Gbit/s.
- Built upon experience in the area of authentication and authorization in the campus network, a further developed logon system, with modern security, is used in the cable connected, as well as the wireless areas (wireless- LAN) in the ICMC/IKMZ building for students, members of the university and external visitors.

## Building in usage (2)



# List of Publications

- Cottbus Technical University Library. - in: El Croquis: Herzog & de Meuron 1993-1997, (1997), S. 140 - 143
- Bibliotheca Universitaria de Cottbus. - in: El Croquis: Herzog & de Meuron 1998-2002, (2002), S. 210 - 219
- Hänel, Klaus; Ache, Robert; Wetzel, Arndt: Energieversorgungskonzept für den Neubau der Universitätsbibliothek der BTU Cottbus. - in: Forum der Forschung 14 (2002) S. 77 - 80
- Tanneberger, Susett: Das Informations-, Kommunikations- und Medienzentrum (IKMZ) der Brandenburgischen Technischen Universität Cottbus. - in: Bibliothek, Forschung und Praxis 27 (2003) S. 69 – 71
- IKMZ. Informations-, Kommunikations- und Medienzentrum der BTU Cottbus. Redaktion: Inken Baller. – Schimmelpfennig, Cottbus 2005
- Degkwitz, Andreas: <http://www.tu-cottbus.de/ikmz> - was heißt IKMZ? - in: ABI-Technik 25 (2005) 1, S. 32 – 39
- Warnatz, Annette: Eine Medienburg aus Glas und Beton. – in: BuB 57 (2005), Ausgabe 5, S. 349 – 354
- Degkwitz, Andreas: Das IKMZ der BTU Cottbus als ein e-Learning-Resource-Center. – in: B.I.T-Online 8 (2005) Ausgabe 2, S. 133 – 138
- Degkwitz, Andreas: Neue Anforderungen an die Informationsinfrastruktur von Hochschulen, in: Bibliothek – Forschung und Praxis 29 (2005) Nr. 3, S. 353 – 359.
- Degkwitz, Andreas: The Information-, Communication- and Media-Center (IKMZ/ICMC) of the Technical University of Cottbus as an e-Learning Resource Center, in: Online Educa Berlin 2005. 11th International Conference on Technology Supported Learning and Training. – ICWE GmbH, Berlin, 2005, S. 149 – 151
- Degkwitz, Andreas: Convergence in Germany. The Information-, Communication- and Media-Center (ICMC/ IKMZ) of Cottbus-University, in: Library Hi-Tech 2006 (to appear)
- Degkwitz, Andreas: Integrated services in Germany, in: SCONUL focus 2005 (to appear)



... thank you!



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