



A SITE-SPECIFIC ART INSTALLATION
BY RALF BAECKER

2021-2023

Gefördert durch
DFG Deutsche
Forschungsgemeinschaft



Ruhr-Universität Bochum | Building MC
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Concept and Design: Annika Gödde & Conny Robrahn | Copyright Pictures: Ralf Baecker, Tim Kramer

RALF BAECKER

(*1977, Düsseldorf, Germany) is an artist working at the intersection of art, science and technology. Through installations, autonomous machines, and performances, he explores the underlying mechanisms of new media and technologies. In his representations and specializations of digital and technological processes he offers a poetic sight behind the surfaces of contemporary image making. At the core of his objects lies the entanglement of the virtual with the real, or rather, with the world.



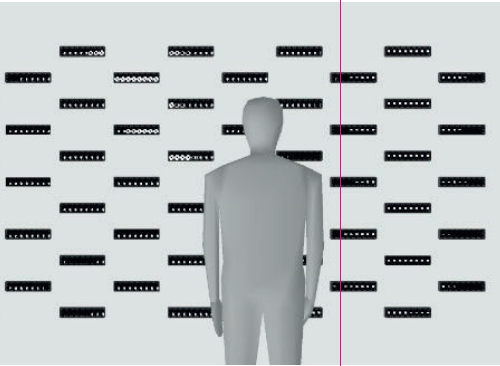
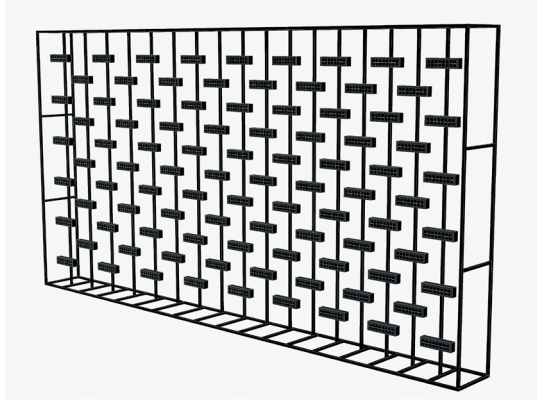
→ ralfbckr.io

Ralf Baecker has been awarded numerous prizes and grants for his artistic work, including the Grand Prize of the 2017 Japan Media Art Festival, and an honorable mention at the 2012 and 2014 Prix Ars Electronica. His work has been presented at international festivals and exhibitions.

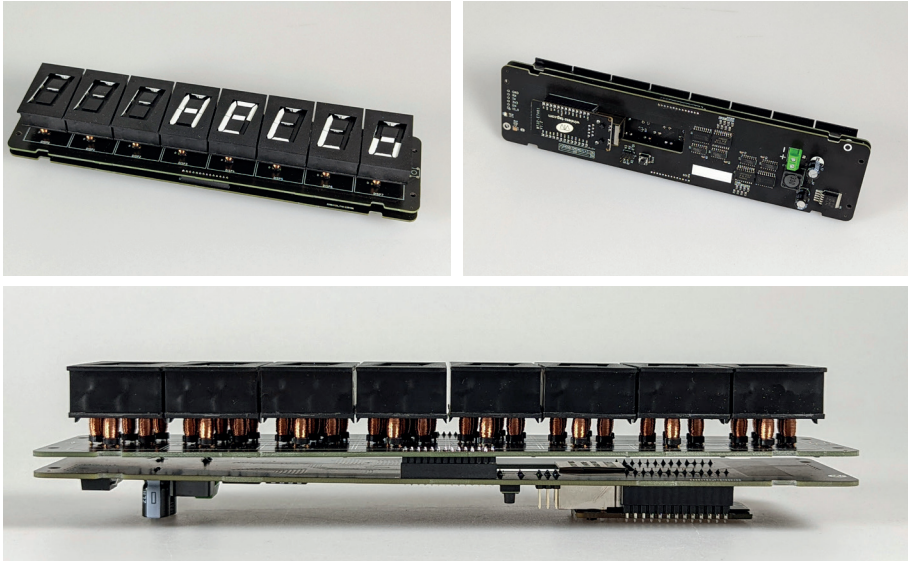
PERCEPTION

ABOUT THE PROJECT

Making IT security tangible – that is the goal of the artwork “DIS/PLAY” created by Ralf Baecker for the **Cluster of Excellence “CASA – Cyber Security in the Age of Large-Scale Adversaries”**. The site-specific art installation extends over the research and work areas of the scientists in the MC building on the campus of the Ruhr-Universität Bochum. It transforms the building into a large distributed computer and screen: Bits and bytes flow through the building, swarms of characters and numbers move through corridors and rooms.

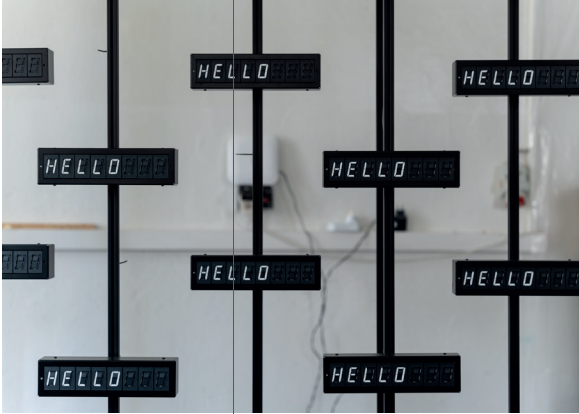


ART



NODES

A node (display unit) consists of an 8-digit electromechanical 7-segment display, as known from public spaces (e.g. in local public transport, at gas stations or offices), and a Wifi-equipped-compatible mini-computer (ESP32). The classic and minimalist displays have a sculptural presence and through their mechanical actuation, also a sonic dimension. All nodes are connected by a network and can exchange data with each other: they form their own computer network.



NETWORK

The main part of the installation is placed in the Open Space on the ground floor, consisting of 94 interconnected nodes arranged in a two dimensional grid, displaying the activities of the research community working and studying in the building. Another 22 nodes are distributed throughout the rest of the house, on the walls of the corridors and in the common spaces. They respond to passing visitors with messages that comment on the topic of surveillance and privacy in a humorous way. At the same time, the messages are sent throughout the building and eventually displayed on the main installation in the Open Space.



COMMUNICATION

WHY SUCH AN ART PROJECT?

At our Cluster of Excellence CASA, scientists from various disciplines are working on the many facets of IT security research. With our public outreach projects, we aim to provide a new, creative and innovative perspective on these often complex research topics. Our outreach activities are intended to build a bridge between science and society, and create the space for public discourse on current developments.

CLUSTER OF EXCELLENCE CASA

The **Cluster of Excellence “CASA: Cyber Security in the Age of Large-Scale Adversaries”** was established at the Horst Görtz Institute for IT Security at Ruhr-Universität Bochum in 2019. It is the only German Cluster of Excellence in the field of IT security and aims to enable sustainable security against large-scale, especially nation-state attackers. CASA is funded by the German Research Foundation (DFG) to ensure excellent research conditions. With its unique holistic and interdisciplinary approach, CASA combines the four main research areas of “Future Cryptography”, “Embedded Security”, “Secure Systems”, and “Usability”.

casa.rub.de

The festive opening
of the artwork
took place on
April 20, 2023



OUTREACH

RESEARCH

A SITE-SPECIFIC ART INSTALLATION

EXPLORE THE ARTWORK!

The art installation DIS/PLAY, created by the artist Ralf Baecker in 2022, spreads across the research and work areas of our scientists on the **ground floor and first floor** of the MC building on the campus of the Ruhr-Universität Bochum. There are many ways to explore the artwork and you are free to find your own way with this map.

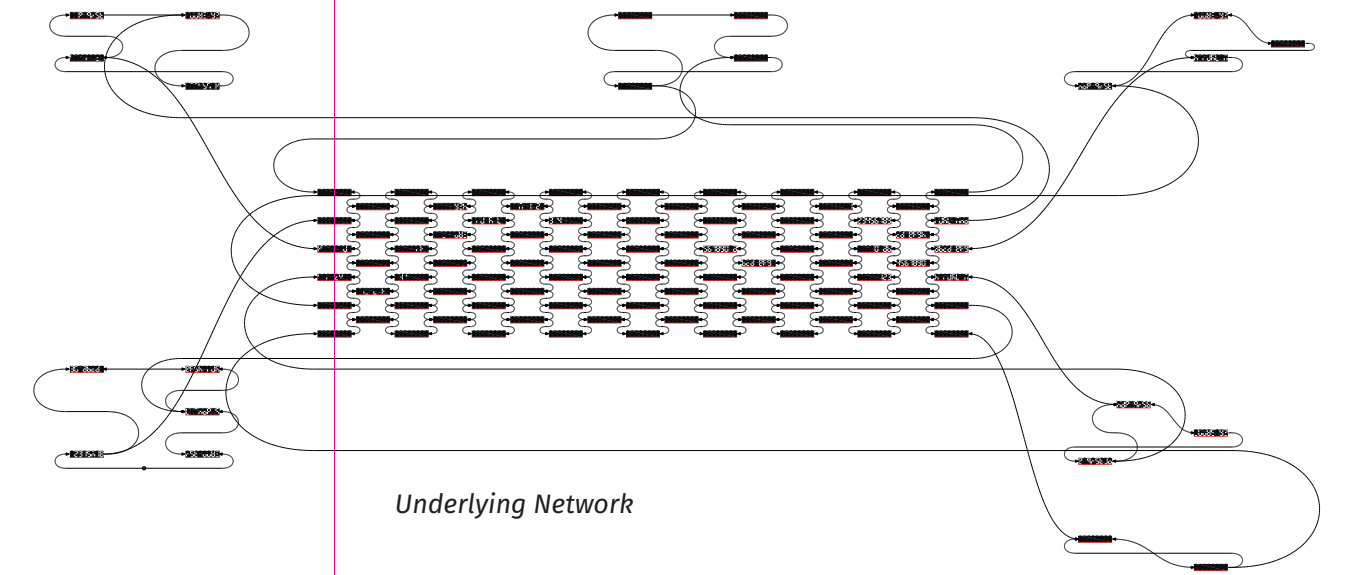
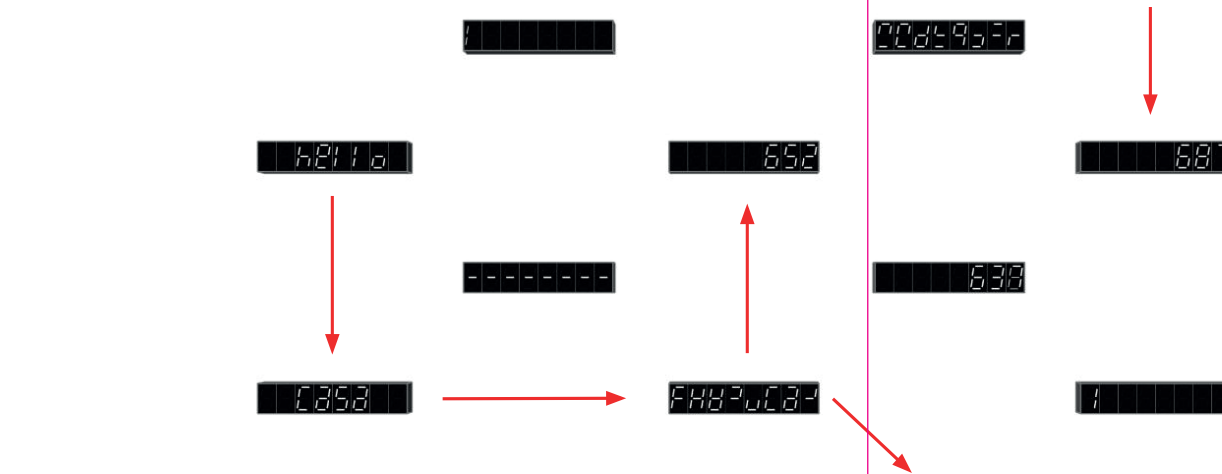
The **main part** (Wall) of the artwork is located in the Open Space on the ground floor. It might be a good idea to start your discovery tour there. From here, the artwork communicates in all directions: right, left, up, down. Let the artwork guide you through the building.

You will find **stairs and elevators** (marked blue) to change floors. On some days, a door or two may be locked and you will have to change your chosen path. Ringing doorbells and knocking on doors can sometimes open up apparent dead ends.

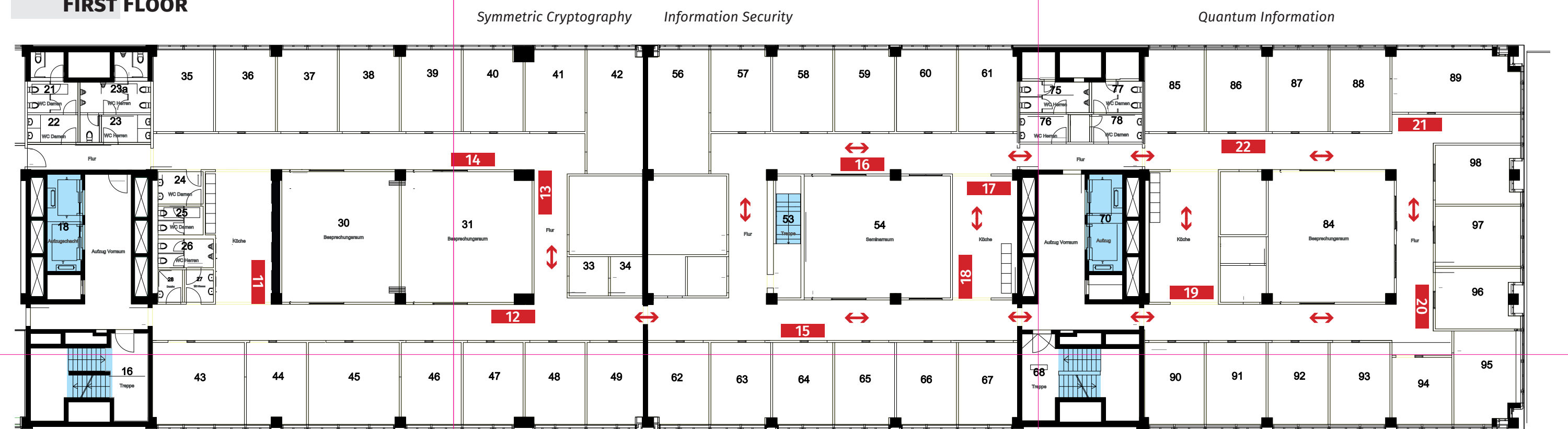
Be open to what turns up on your exploratory tour! Stay curious about what you'll learn about IT security research and whom you'll meet along the way!

IN CASE YOU GET LOST:

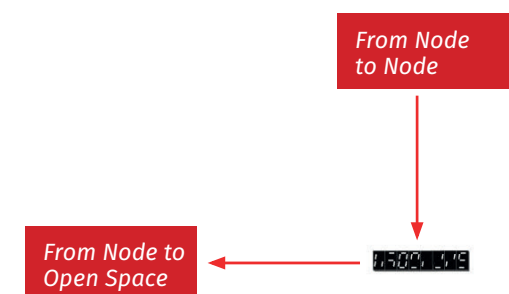
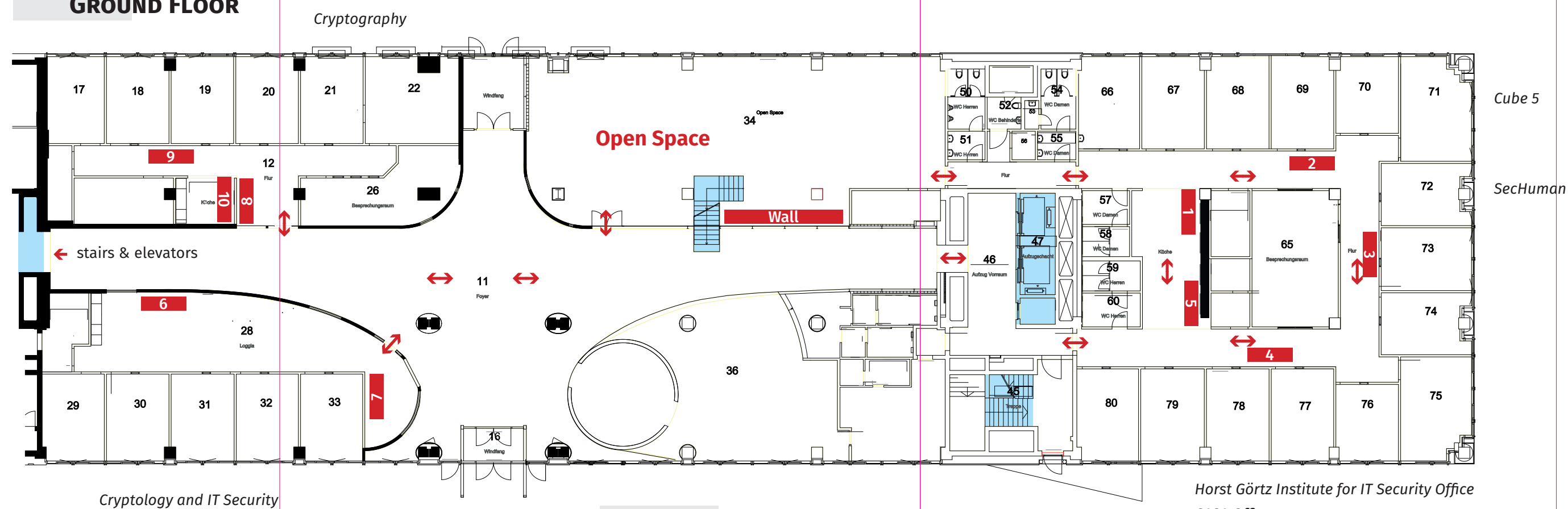
There are many nice people in the building who will show you the way back.



FIRST FLOOR



GROUND FLOOR



casa.rub.de/display

Cryptology and IT Security

Horst Görtz Institute for IT Security Office
CASA Office