

Snøhetta & Özer/Ürger Architects & Battle Mccarthy, Proposal for the Çanakkale Communication Tower (Turkey), 2014

Swiss Space Center

A New Ground Station for Earth Observation

Final Jury: HIB Open Space 3, 31.05.17, 9AM

Design Studio FS2017

The possibility to observe the Earth from the space using artificial satellites has drastically transformed the way we interact with our environment. Due to the fast development of these technologies to transfer, store and analyze huge amounts of data, information has turned into an extremely powerful means to anticipate and shape the human development. In this context, the traditional typology of the communication tower that proliferated during the 20th Century needs to be re-evaluated and upgraded to respond to the needs of contemporary communications systems.

The Swiss Space Center emerges as a local institution that is currently participating in the research and development of new technologies related to satellite communication systems and data storage. The Design Studio Schwartz FS2017 will be focused on the design of a new ground station for earth observation in collaboration with the Swiss Space Center. This will combine a tower for satellite communication, a data center, a research hub and facilities for visitors. Because of its average 3500 hours of sunshine per year, the spectacular site of Leuk (Wallis) has been chosen as the location for the project.

Building on the reconciliation of the disciplines of engineering and architecture, as promoted by the Chair of Structural Design, the aim of the Design Studio Schwartz is to merge the functional expertise of engineers with the design creativeness of architects. The development of the semester project will be based on the application of design strategies that integrate structural and spatial principles from the early stages of the design process. The experimental design process will be carried out through the construction of both physical and digital models. This will allow for the exploration of the permeability of the boundary between structural design, architectural design and construction.

Teaching Team

Prof. Dr. Joseph Schwartz Juan José Castellón Pierluigi D'Acunto Patrick Ole Ohlbrock Alessandro Tellini

Collaborators

Prof. Richard Horden (Horden Cherry Lee, London) Rita Illien (Müller Illien Landschaftsarchitekten, Zürich) Stefan Buckenmaier (Swiss Space Center, ETH Zürich)

Invited Lecturers

Alberto Veiga (Barozzi/Veiga, Barcelona) Patrick Lüth (Snøhetta, Innsbruck)

Guest

Dr. Alla Vronskaya (gta, ETH Zürich) Jeroen Janssen (AKT part II, London) Dr. Maximilian Schrems (NNE AG, Basel) Dr. Reinhard H. Czichy (Synopta GmbH, St. Gallen) Dominik Müller (Swisscom, Bern) Jürg Stäuble (Swisscom, Bern)

Students

Lidia Bischoff Katja Blumer Marco Bruggmann Alexander Böhm Weilun Chen Micha Gerhard Julien Graf Quentin Halter Patricia Hedinger Jason Hoffmann Nirvan Karim Guy Keller Dylan Kreuzer Magnus Lidman Mauro Manco Luca Martino Rodrigo Mendoza Davide Moraillo Ludovic Regnault Cyrille Sager Fabian Schwindling Mino Sommer Paul Wolf

