

Image

Knowledge

Gestaltung

An Interdisciplinary Laboratory

Organisation

Science of Structures and 3-D Code

Funded by

Image Knowledge Gestaltung

Cluster of Excellence of Humboldt-Universität zu Berlin

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Please register in advance at michael.friedman@hu-berlin.de

www.interdisciplinary-laboratory.hu-berlin.de

Directions

Bhf. Hackescher Markt

 S5 S7 S75

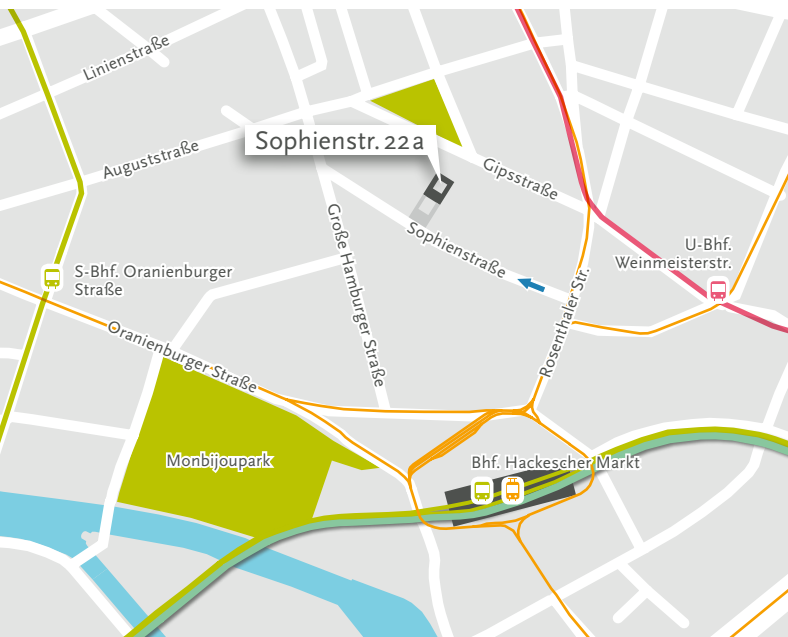
 Tram M1 M4 M5 12

S-Bhf. Oranienburger Straße

 S1 S2 S25

U-Bhf. Weinmeisterstraße

 U8



Workshop, 26 March 2015

Sophienstr. 22a, 10178 Berlin

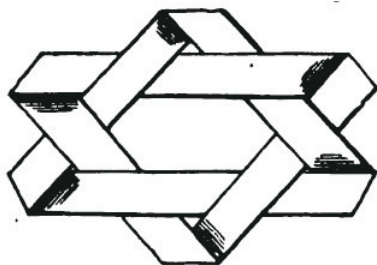
THE FOLD

IN SCIENCES, ART AND DESIGN

The group *Science of Structures and 3-D Code* will hold a one-day long workshop on the subject of the *Fold* on the 26th of March. The workshop is intended for all the participants of the project, as well as for other members of the Cluster of Excellence *Image Knowledge Gestaltung* and will take at Sophienstr. 22a in Mitte (second floor, rear building).

The *fold* might be thought of as a 1-dimensional code, inscribed on a 2-dimensional surface, which gives rise to a 3-dimensional event. However, different disciplines have different understanding of what a *fold* is, and hence the main focus of the workshop will be to formulate a coherent and clear notion of it in all the areas, which participate in the project. Lectures from all the fields of research will be held, including physics, bio-materials, biology, mathematics, architecture, design, history of science and philosophy. Every lecture will be 30 minutes long, accompanied by a 30 minutes discussion, in order to understand the differences and the affinities between the different concepts and actions that are enfolded within the Fold, such as: Bend, Corrugation, Crease, Twist etc.

A (preliminary) program can be found below. As always, every member of the group is welcome to present further lectures and contributions. The workshop will be a base for a Sammelband – a collection of papers dealing with *Fold* concept from different angles, planned to be published in 2016. We hope that all members of the group will be able to contribute to it.



picture: from the book »The Kindergarten guide, first volume: the gifts«, Marian Kraus-Boelte, John Kraus, 1877

10.00 **Opening lecture** Wolfgang Schäffner

PART 1 Moderation: Sandra Schramke

10.30 **Fold and folding in lightweight structures** Joachim Krausse

11.00 **Origami: a brief introduction to the history of paper folding**
Matthias Wiebel

11.30 **Discussion**

12.00 COFFEE BREAK

PART 2 Moderation: Samo Tomšič

12.15 **In the labyrinth of the fold: Leibniz und Deleuze** Angelika Seppi

12.45 **The fold: philosophical and mathematical framework with some »applications«** Jochen Brüning

13.15 **Discussion**

13.45 LUNCH BREAK

PART 3 Moderation: Karin Krauthausen

15.00 **Protein folding** Thomas Weikl

15.30 **Folding in biomaterials research** Lorenzo Guiducci

16.00 **Discussion**

16.30 COFFEE BREAK

PART 4 Moderation: Karin Krauthausen

17.00 **Folding and wrinkling of a one atom thick sheet of graphene oxide** Fardin Gholami

17.30 – 18.30 **Closing discussion** Wolfgang Schäffner