

**Prof. Dr.-Ing. Timo Mappes**

Deutsches Optisches Museum

c/o Hans-Knöll-Str. 1

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## **Deutsches Optisches Museum: Edutainment for Optics**

### **Abstract**

From a global perspective, Jena is the hotspot for optics and photonics. The Deutsches Optisches Museum (D.O.M.) aims to make this strength accessible to everyone. As key element of didactics the best of classical museums and established Science Centers is blended into a novel educational form at D.O.M.

Within this approach aesthetics are counted as a universal form of entertainment, creating a high-quality site of edutainment. Scheduled to open in 2028, the exhibition will seamlessly integrate three elements:

(1) Interaction. At more than 100 interactive stations, visitors will grasp optical laws and phenomena. As unique feature they will conduct optical observations on and with genuine historical optical instruments at numerous points within the exhibition. We will protect our historical artefacts in air-conditioned display cases. However, with our so-called relay-optics, we will enable visitors to look through these instruments, making them thus approachable.

(2) Milestones. Our visitors will see historical equipment used for daily work. In addition, we will have milestones of optics in display, for example the telescope of the SOFIA-experiment, once flying in the Stratosphere in a dedicated Boing 747.

(3) Latest Research. In the permanent exhibition, young researchers in optics and photonics will present their cutting-edge research findings to a general audience in a popular science format. To address this public outreach of academic research, we implement eight stations as "Showcase of Optics Research".

The exhibition is housed in the listed building of the former optician's school. It is expanded by an artistically designed new building with an iconic façade. While Andreas Dopfer's Berlin based architectural Studio Qwertz designed the body of this modern building, the artistic façade was designed by Studio Other Spaces (Olafur Eliasson and Sebastian Behmann) as their first architectural project in Germany. With this very architecture the exhibition reaches out, far into public space.

### **CV**

Timo Mappes has a professorship on the history of physics with a major in Science Communication at University Jena. He got his PhD with great distinction and his habilitation in mechanical engineering from Karlsruhe Institute of Technology (KIT). He was guest-professor in France and Denmark before he joined the ZEISS group for six years, eventually as Senior Vice President Innovation for the spectacle lens business. Since 2018 he is building Deutsches Optisches Museum in Jena.