

MATHEMATICS AND MATHEMATIZATION OF PHYSICAL THEORY HISTORICAL AND CONCEPTUAL ASPECTS

22-23 June 2018
05-432 (Hilbertraum)

22 JUNE 2018

from 9:30 Coffee

10:15-11:30: **JOHANNES LENHARD** (BIELEFELD)

The Tumultous 1890s: Anti-Mathematicians and the Mathematization of Engineering

11:30-11:45 Coffee

11:45-13:00: **SCOTT WALTER** (NANTES)

Van der Pol and the Van der Pol Equation

13:00-14:30 Lunch

14:30-15:45: **TIM RÄZ** (BERN)

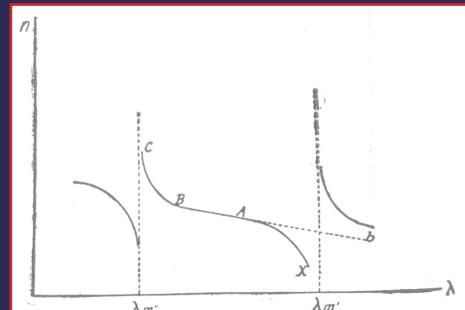
Euler's Königsberg: The Explanatory Power of Mathematics

16:15-17:30: **TINNE HOFF KJELDSEN** (COPENHAGEN) and **ANDREA LOETTGERS** (BERN)

Nicholas Rashesky and Alfred Lotka: Different modelling strategies in the beginning of mathematical biology in the early 20th century

17:30-18:45: **MICHAEL FRIEDMAN** (BERLIN)

On "folded" curves and folded surfaces: (attempts of) visualisation of the Weierstraß function



23 JUNE 2018

08:45-10:00: **TILMAN SAUER** (MAINZ)

How to Interpret Non-Riemannian Geometry

10:00-10:30 Coffee

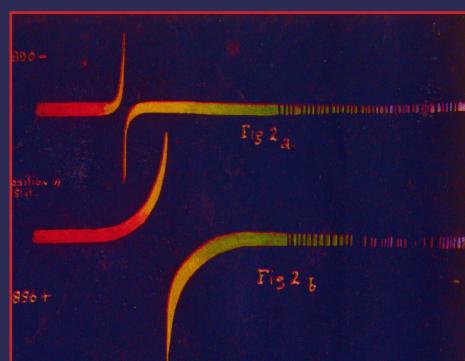
10:30-11:45: **MARTA JORDI TALTAVULL** (MAINZ)

From a physical model to a mathematical tool: the resonance model in optics from ether theories to quantum mechanics

11:45-13:00: **ARIANNA BORELLI** (BERLIN)

The Born-Wiener paper on quantum theory (1926): operators between physics, mathematics and electrical engineering

13:00: Lunch



ORGANIZER

Tilman Sauer

VENUE

Johannes Gutenberg University Mainz

Institute of Mathematics

Staudinger Weg 9, 55099 Mainz

Hilbertraum (05-432)



FURTHER INFORMATION

<https://www.geschichte.mathematik.uni-mainz.de/workshop-mathematization/>