

## SELECTING EPISODES SHEDDING LIGHT ON THE HISTORY OF THE FUNCTION CONCEPT: HISTORICAL AND DIDACTICAL ANALYSES OF A LESSON-STUDY IN GRADE 10

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The design of didactic situations aiming to take students along a cognitive path of amendment and expansion of their concept of “function” has already been studied in an HPM context (Kjeldsen & Petersen, 2014). In 2018, a different session – with roughly the same goals – was designed and implemented in the context of the Shanghai HPM-studio, in the lesson-study format (Liu, Shen & Wang, 2019; Wang & Shen, 2020). The goal of the workshop is to further describe, analyze, and discuss the various choices made by the participants in this lesson-study.

More specifically, we plan to:

- Present a selection of historical episodes – some well-known, some less well-known – which could be used in the design of a session aiming to take students along the expected cognitive path.
- Offer a didactical analysis of the expected benefits of an integration of accounts of these episodes in the session design.
- Share some empirical data collected during the implementation of the session in 2018 so as to discuss the choices made by the stakeholders in the lesson-study, as well as their actual effects on students.

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