



ICMT /2017

**II International Conference on
Mathematics Textbook Research and Development**

**II Conferência Internacional em
Pesquisa e Desenvolvimento de Livros Didáticos de Matemática**

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Symposium B:

Deductive Reasoning, Arguing and Proof in Textbooks

Chairs: Luísa Rodriguez Doering, Cydara Cavedon Ripoll (Universidade Federal do Rio Grande do Sul, Brazil)

There is international recognition of the importance of reasoning and proof in students' learning of mathematics at all levels of education, and of the difficulties met by students and teachers in this area. Indeed, many students face difficulties with reasoning about mathematical ideas and constructing or understanding mathematical arguments that meet the standard of proof. Teachers also face difficulties with reasoning and proof, and existing curriculum materials tend to offer inadequate support for classroom work in this area. (THEMATIC STUDY GROUP 18 REASONING AND PROOF in MATHEMATICS EDUCATION, INTERNATIONAL CONGRESS ON MATHEMATICS EDUCATION – ICME 13, July 2016)

In the International Congress on Mathematics Education ICME 13 there were reports that in many countries an emphasis on proof is reappearing in mathematics curricula. Hence it is of major importance that the textbooks support that tendency. Do textbooks include contexts, contents, results that meet the standard of proof? If yes, are the arguments appropriate for students at the proposed level? Are they correct? Are they coherent to the previous contents of the textbook?

We invite submissions on reports referring to the situation in the author's country concerning reasoning, arguing and proof in the textbooks, illustrated by excerpts confirming the situation. We also invite submissions of reports on experiences focusing on mathematical arguing in the classroom, based or not on textbooks, using or not symbolic language.

The 180 minutes of this symposium will be used for short presentations followed by discussions aiming to get an overview of the state of the art concerning reasoning in textbooks.

**Please submit a paper abstract of maximum two pages until the 31st of October 2016.
For detailed information about formats and the submission process consult:**

<http://www.sbm.org.br/icmt2/submissions/>.