

# **Facing the change and meeting the challenge: Mathematics curriculum of *Tongwen Guan* in China in the second half of the nineteenth century**

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## ABSTRACT

It is commonly recognized that the second wave of transmission of Western science and mathematics into China took place in the second half of the nineteenth century, thereby starting a process of modernization, which has become synonymous with “Westernization”, of the country. In this context mathematics education in China also went through a process of modernization. During this period of great change reformers faced serious challenge and went through a “mental struggle”. This paper discusses this challenge and mental struggle by taking a close look at the controversy over the establishment of *Tianwen Suanxue Guan* (School of Astronomy and Mathematics) in *Tongwen Guan* (School of Combined Learning), one of the schools of Western learning at the time. The attempt of integrating Western mathematics with Chinese traditional mathematics is also discussed through the study of some questions sampled from examinations and students’ homework assignments of this school.

Keywords: *Tongwen Guan*, academies in China, modernization of mathematics education, Chinese mathematics in the nineteenth century