## SYMPAB - (16501) - PARABOLA AND PARABOLIC MOTION: CROSSING BOUNDARIES BETWEEN PHYSICS AND MATHEMATICS

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**Short Abstract**

In this contribution, we discuss the design and the implementation of an interdisciplinary module on parabola and parabolic motion involving about 60 mathematics and physics student-teachers. Even if the two themes are obviously inter-related, habits, textbooks and school practices created artificial barriers that separate them into disciplinary enclaves. The designed module aims to search for a theoretical-based model of interdisciplinarity on a concrete example in order to break down such artificial barriers and to exploit this topic as a historical case to reflect on disciplines' identities and their intertwining. From the preliminary analysis of the collected data, we observed that the construction of shared terminology that worked as “inter-disciplinary scaffolding” contributed to making the student-teachers change their perspectives on mathematics and physics as disciplines and on the crossing mechanisms underlying their interplay.