

SYMPAB - (16497) - TEACHING CRYPTOGRAPHY TO FOSTER INTERDISCIPLINARITY BETWEEN MATHEMATICS AND COMPUTER SCIENCE

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Short Abstract

The paper presents theoretical-based research aiming to design modules for secondary teacher education to foster interdisciplinarity between Mathematics and Computer Science. Our theoretical approach is based on interdisciplinarity frameworks (in particular, on boundary objects and epistemological or linguistic activators) and design methodologies (Study and Research Paths for Teacher Education, Theory of Didactical Situations). Then, we describe the design of a teaching module in cryptography (as a domain example) and its a priori analysis in the frame of our theoretical approach. We show that cryptography is a relevant topic to foster interdisciplinarity between Mathematics and CS from an educational perspective.