Code B_2369

Department	Mathematics and Computer Sciences
UniCa reference person	Stefano Bonzio
Project title in English	Algebraic properties of regular varieties
Project title in Italian	Proprietà algebriche di varietà regolari
Subject area of reference (World University Ranking)	PHYSICAL SCIENCES (inc. Mathematics, Chemistry, Geology, Earth & Marine Sciences)
Project summary and VPS' profile	A variety is regular when it satisfies regular identities only, namely identities such that the same set of variables appears on both sides. Particularly interesting are the regularizations of strongly irregular varieties, which can be represented as Plonka sums of members of the starting (strongly) irregular variety. Some (universal) algebraic properties of regularizations are known, for instance the structure of free algebras and the lattice of subvarieties. The project aims to investigate further properties such as the lattice of congruences of regular varieties, amalgamation property, the finite embeddability property and other properties relevant for the logical application of regular varieties. The VPS is expected to have a strong background in universal algebra, with in additional knowledge of the theory of Plonka sums.
Proposed length of stay	Short visit of 10 days
Expected period of activity	June 2024
Academic position of the VPS'	Professor
Course of Study	Laurea magistrale (2nd cycle University Degree), Dottorato di ricerca (PhD Course)
Language of instruction	English