

Solution of algebraic and differential equations: new methods of resolution

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This project started with a double motivation: research and training of new researchers. Regarding the first point, the main researcher held a postdoctoral fellowship at the University of Valladolid between September and December 2010. This fellowship allowed fulfilling the objective of the proposed research: constructing a monomial system for valued fields with real closed residue field or algebraically closed field.

As far as education of new researchers is concerned, a first objective was to strengthen the education of mathematicians in Peru for the medium term, to become a research group in the construction explicit line of algebraic and differential equations. For this purpose, the main researcher coordinated and organized, in the framework of the José Tola Pasquel chair, the delivery of "Formal Calculation of differential equations" and "Local analytic geometry" lectures.

In the same line, the organization of intercontinental seminars was completed bringing together nodes of Mexico, Colombia, Brazil, Spain and Peru. To date, there have been three seminars simultaneously broadcast to all nodes from the PUCP. The 4th Doctoral School (IV Escuela Doctoral de Matemáticas ECSING) was defined to be held June 13 - 24, 2011 via video conferencing where all nodes will participate.

More information: www.ecsing.pucp.edu.pe