

Exposé court

17 *Effective results for Diophantine equations over finitely generated domains*

Bérczes, Attila (University of Debrecen)

In the 1980's Győry developed an effective specialization method for proving effective finiteness results for Diophantine equations with solutions from an integral domain finitely generated over \mathbb{Z} which may contain transcendental elements, too. In 2013 Evertse and Győry extended this method to work for arbitrary finitely generated domains of characteristic 0 over \mathbb{Z} . Using this method, Evertse, Győry, Koymans, and Bérczes in several papers established general finiteness theorems over finitely generated domains of characteristic 0 for various types of Diophantine equations. In this talk we present a short survey of the results obtained by the above mentioned specialization method.