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``Euler systems''

Abstract: Connections between special values of L-functions and orders of ideal class groups (or generalized ideal class groups) are central to many important results and conjectures in number theory and arithmetic algebraic geometry. Over the last 10 years there has been significant progress on some of these questions, using the concept of an `Euler system' which was introduced by Kolyvagin. In this talk we will discuss what Euler systems are and what they are good for.