

המחלקה למתמטיקה, בן-גוריון

גאומטריה אלגברית ותורת המספרים

ביום רביעי, 6 בדצמבר, 2017

בשעה 15:10 – 16:30

101- Math

ההרצאה

Hilbert for conjecture Bloch-Kato p-adic the On forms modular

חינתן על-ידי

(Paris-Sud (Université Disegni Daniel

תקציר: The Swinnerton-Dyer and Birch conjecture predicts that the rank of the group of rational points on an elliptic curve E over \mathbb{Q} is equal to the order of vanishing of the L -function of E at $s=1$. This is a generalization of the conjecture of Bloch and Kato, which was formulated in terms of Galois representations. The Bloch-Kato conjecture is a version of the Hilbert conjecture, which states that the rank of the group of rational points on a modular curve of weight $2k$ is equal to the order of vanishing of the L -function of the curve at $s=k$. The conjecture was proved by Perrin-Riou in 1987, and the case of weight 2 was proved by Heegner in 1953. The conjecture is still open in general, but it has been proved for many special cases.