

Nuno Freitas. **The asymptotic Fermat's Last Theorem**

Let K be a number field. The asymptotic Fermat's Last Theorem over K is the statement that there exists a constant B_K , depending only on K , such that for all primes $p > B_K$ all solutions to the Fermat equation $x^p + y^p = z^p$ satisfy $xyz = 0$. In this talk we will discuss the relation between asymptotic FLT over K and the existence of certain elliptic curves over K . We will discuss some recent progress on this problem. This is joint work with Alain Kraus and Samir Siksek.