SEMINARIO DI MATEMATICA

Martedì 25 ottobre 2016

ore 16:30

Scuola Normale Superiore

Pisa

Aula Bianchi Scienze

**David Masser**

(*University of Basel)*

terrà un seminario dal titolo:

**“Elementary integration and relative**

**Manin-Mumford”**

**Abstract:**

*In 1916 Hardy wrote “... no general method has been devised by which we can always tell, after a finite series of operations, whether any given integral is really elementary, or elliptic, or belongs to a higher order of transcendents.” And 100 years later nothing has changed too much. Every schoolgirl knows that R √ dx x(x−t) is elementary; that is, it can be expressed with logarithms and exponentials. But not R √ dx x(x−1)(x−t) unless t = 0, 1. In 1981 James Davenport asserted that if f is algebraic then R f(x, t)dx is elementary for at most finitely many special complex values t (unless it is elementary for a general value of t). I describe progress by Umberto Zannier and myself on Davenport’s Assertion. The main tools are suitable generalizations of the Manin-Mumford conjectures, in their very simplest form about roots of unity, but here about torsion on families of group varieties.*

Tutti gli interessati sono invitati a partecipare.

Classe di Scienze Matematiche e Naturali