Nairobi Seminar in Algebraic Geometry

Prof. Bruno Chiarellotto from the University of Padova, Italy will visit the school on 18/12/2015 (9am-3.30pm) and will give a series of talks on the following topics.

Venue: SPS board room

Talks:

1) The life of Alexander Grothendieck.The life of the creator of modern algebraic geometry.

The talk will be for general (math) public

2) **Zeta functions.**

We will give an informal introduction to the proof of the fact that zeta function of a projective smooth variety over a field in characteristic p is a rational functions. We will start with the definition and some examples. We will try to stress "the motivic meaning" of such a functions: i.e.   We will try to show how the shape of the zeta function does not depend only from the characteristic p.

The two talks will be divided in two parts: the first will be for general
(math) public. the second is more advanced.

3) **The fundamental group in its various realizations.**

First the notion of fundamental group for topological spaces will be introduced and we will link it to the singular homology. Different equivalent definitions will be given. Such as different definitions will show how the notion of fundamental group (or, at least, a part of it) can be translated in different frameworks:arithmetic geometry (etale fundumental group), in differential form (connection, differerentail systems), in categories ...

Kindly confirm your attendence using the google doodle poll

http://doodle.com/poll/892hqzhqq6esam3h