

## **abstract**

ARITHMETIC HOMOGENEOUS SPACES

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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We consider maps between smooth projective curves and some arithmetic and geometric properties of such maps. In particular, we will discuss the case of maps from the generic Riemann surface of genus  $g$  -- a problem first seriously looked at by Zariski. A special case is when  $g=0$  (i.e. rational functions on the Riemann sphere).

We will show how serious group theory (permutation and linear representation theory) can be used to study such problems.