

abstract

COMPUTER SCIENCE/DISCRETE MATH I

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

I will discuss this problem: given rational functions f and g over a field K , determine whether there are nonconstant rational functions u and v over K such that $u(f(x)) = v(g(x))$. An equivalent problem is to compute the intersection of two fields which lie between K and $K(x)$. This has been solved completely in case f and g are polynomials and K has characteristic zero; but it remains open in nearly all other cases. I will present a new algorithm for this problem.