

**Speaker:** Avinash Sathaye

**Title:** A curious question on Field Extensions

**Abstract:** Given an irreducible polynomial  $f(x)$  over a field  $k$  of characteristic zero, we consider the field extension  $L=k(t)$  where  $t$  is a root of  $f(x)$ . The general question is whether  $L=k(s)$  where  $s=f'(t)$  = the derivative of  $f(x)$  evaluated at  $t$ . I will discuss a motivation for the question, known cases and other related question which will imply the result.