Title:	Springer's Theorem and Its Analogues
Authors:	Choudhary, Rahul Kumar (/jspui/browse?type=author&value=Choudhary%2C+Rahul+Kumar)
Keywords:	Mathematics Algebraic Theory Quadratic Forms Field Extensions Springer's Theorem
Issue Date:	26-Jun-2015
Publisher:	IISER-M
Abstract:	In the algebraic theory of quadratic forms a fundamental result due to Springer was given in 1952. Let k be a field with chark 6= 2, Springer proved that if a quadratic form q over k acquires an isotropy in odd degree extension of k then q has an isotropy over k. Springer's theorem has been generalized in various way, similar problems have been posed for hermitian forms over finite dimensional central simple algebra over k with involutions. The weak version of Springer's theorem for hermitian forms was proved by Bayer-Fluckiger and Lenstra [3]. The strong version of Springer's theorem for hermitian forms is still an open question. We will see an example of anisotropic hermitian form over central division algebra with involution of type of second kind(unitary involution) which becomes isotropic over an odd degree extension.
URI:	http://hdl.handle.net/123456789/670 (http://hdl.handle.net/123456789/670)
Appears in Collections:	MS-09 (/jspui/handle/123456789/393)