

Analele Universității București, Matematică  
Anul LIV(2005), pp. 161–170

## The Space of Real Quadratic Forms

Kostake TELEMAN

September 3, 2004

**Abstract** - We give some properties of the space of real quadratic forms of fixed rank  $N$  and fixed index  $r$ , which are invariant with respect to the natural action of the linear group  $SL(N, \mathbb{R})$ .

**Key words and phrases** : Homogeneous fibre bundle, connection, symmetric space.

**Mathematics Subject Classification** (2000) : 53A55,53C30,53C35