## 1135-11-1238 Wolfgang M. Schmidt\* (wolfgang.schmidt@colorado.edu). On parametric geometry of numbers.

We study successive minima of a given lattice with respect to a symmetric convex body K(q) depending on the parameter q. More precisely, K(q) is the image of a given body K when applying the q-th power  $T^q$  of a symmetric linear map T. The subject arose from Diophantine Approximation where (in the simplest case) one deals with approximation to a given irrational by rationals with denominator at most  $e^q$ . After a brief review of basic facts we will discuss some current work and conjectures. (Received September 20, 2017)