

ATELIER EN ANALYSE CONVEXE ET ANALYSE GÉOMÉTRIQUE ASYMPTOTIQUE  
16-20 AVRIL, 2012

WORKSHOP ON CONVEXITY AND ASYMPTOTIC GEOMETRIC ANALYSIS  
APRIL 16-20, 2012

## Difference bodies in a complex vector space

Judit Abardia \*

abardia@math.uni-frankfurt.de

---

The difference body of a convex body in a real vector space is the unique Minkowski valuation which is continuous, translation invariant and covariant under the (real) special linear group. In this talk, a complex analog of this characterization result of Ludwig will be presented. That is, we will describe the space of Minkowski valuations on a complex vector space which are continuous, translation invariant and covariant under the complex special linear group. A family of valuations satisfying these properties appear.

---

\*Institut für Mathematik, Goethe-Universität Frankfurt, Robert-Mayer-Str. 10, D-60054 Frankfurt, GERMANY.