Horst Martini* (martini@mathematik.tu-chemnitz.de), Faculty of Mathematics, University of Technology Chemnitz, 09107 Chemnitz, Saxony, Germany. Special convex sets in normed linear spaces.

It is natural to extend problems and results from classical convexity to finite dimensional normed linear spaces (Minkowski spaces). In this talk several new results in this direction will be presented, all of them related to the study of special classes of convex bodies. These results refer to new characterizations of centrally symmetric convex bodies (by using suitably defined surface area measures in Minkowski spaces), the notion of reducedness in Minkowski spaces, and convex sets in normed planes having the circular hull property (which is closely related to the concept of constant width). These new results were obtained jointly with E. Makai, G. Averkov, and M. Spirova. (Received August 07, 2008)