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Tinne Hoff Kjeldsen* (thk@ruc.dk), IMFUFA, NSM, bygning 27, Roskilde University, Universitetsvej 1, Post Box 260, 4000 Roskilde, Denmark. *From idea to mathematical object: Herman Minkowski's introduction of general convex sets.*

In this talk it will be discussed how the general concept of a convex body emerged and took form in Minkowski's work at the turn of the 20th century. The development of the idea of a convex body is followed through shifts in focus of research in parts of Minkowski's work. These shifts are identified by analysing which objects Minkowski studied, and which methods he used in the process of knowledge production. In particular, it will be illustrated how Minkowski used geometry to investigate the minimum problem for positive definite quadratic forms and then turned towards a study of the geometrical method itself, which then became the object under investigation. This turned out to be a very fruitful shift in focus from which a new theory, geometry of numbers, emerged along with the introduction of new mathematical objects, the general convex set being one of them. (Received August 27, 2009)