1041-52-173   **K. Bezdek** and **A. E. Litvak*** (`alexandr@math.ualberta.ca`), Dept. of Math. and Stat. Sciences, University of Alberta, Edmonton, Alberta T6G2G1, Canada. *Covering convex bodies by cylinders.*

In connection with an unsolved problem of Bang (1951) we provide a lower bound for the sum of the base volumes of cylinders covering a given convex body in terms of the relevant basic measures of the body. As an application we establish a lower bound on the number of lines needed to cover all the integer points in the body. (Received August 10, 2008)