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Fred J. Hickernell* (hickernell@iit.edu), Department of Applied Mathematics, IIT, Room 208, Bldg. E1, 10 W. 32nd Street, Chicago, IL 60616. *Energy and Discrepancy Are Equivalent.*

Evenly spread points are known to be useful in approximating functions and approximating integrals of functions. Two measures of even spread are energy (e.g., the coulomb energy of charged particles) and discrepancy (e.g., the Kolmogorov-Smirnov statistic involving the empirical distribution function of the points). These two measures are shown to be equivalent. (Received September 25, 2006)