1035-W1-693   **Woodford W. Zachary*** (`wwzachary@earthlink.net`), Dept. of Electrical Engineering, Howard University, Washington, DC 20059. *Henstock-Kurzweil integration for linear operators.*

A proposal will be discussed for the inclusion of a discussion of Henstock-Kurzweil (HK) integration for linear operators as a topic in graduate courses in real analysis. For functions, this type of integration is a Riemann-type process that extends Lebesgue integration. The corresponding result for operator HK integration is that it is an extension of Bochner integration. It will be shown how results for operator HK integration can be obtained by means of a generalization of HK integration for functions. (Received September 13, 2007)