1067-35-1679 **Thomas J. Bieske\*** (tbieske@math.usf.edu), 4202 E. Fowler Ave., PHY 114, Tampa, FL 33620, and John Ryan, 301 SCEN, University of Arkansas, Fayetteville, AR 72701. *The Infinite Dirac Operator.* 

We define the infinite Dirac operator and explore some key properties, particularly its conformal invariance. We also introduce the infinite Dirac operator on the sphere  $S^n$  and establish the relationship between the two infinite Dirac operators via the Cayley transformation. (Received September 21, 2010)