1031-53-130 Ana Cannas da Silva\* (acannas@princeton.edu). Number Theory from Atiyah-Bott for Orbifolds. Preliminary report.

Reciprocity laws of Dedekind and Rademacher, as well as higher-dimensional generalizations of these, are deduced by applying an adaptation of the Atiyah-Bott formula to appropriate elliptic complexes on twisted projective spaces. (Received August 07, 2007)