

1116-VU-2125 **John E Mosley*** (john.mosley@uky.edu). *The Image of the Witten Genus.*

The Witten genus is a variant of Ochanine's elliptic genus and can be interpreted as the index of the Dirac operator on the free loop space of a manifold. The natural domain of the Witten genus is string cobordism. The image of this ring under the Witten genus is difficult to compute, but is of some interest. A more tractable problem may be to compute the image of Spin- and SU-cobordism under the Witten genus. In this talk, we will discuss recent progress on this question. (Received September 21, 2015)