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Robert D Little* (little@math.hawaii.edu), Department of Mathematics, University of Hawaii at Manoa, 2565 McCarthy Mall, Honolulu, HI 96822. *Cyclic Cobordism of Surfaces and the Relative Class Number.*

A theorem of Ewing asserts that the image in a canonical group of algebraic integers of the cyclic cobordism group of surface maps of odd prime order under the equivariant signature is equal to the relative class number of the odd prime. We extend this result and obtain an upper bound for this index in the case of maps of order a power of an odd prime. (Received December 07, 2011)