

1015-57-85

Cynthia L. Curtis* (ccurtis@tcnj.edu), Department of Mathematics and Statistics, The College of New Jersey, Ewing, NJ 08628. *A $PSL(2, \mathbb{C})$ Casson invariant.*

We use intersection theory techniques to define an invariant of closed 3-manifolds counting the characters of irreducible representations of the fundamental group in $PSL(2, \mathbb{C})$. We note several properties of the invariant and compute the invariant for certain Seifert fibered spaces and for some Dehn surgeries on twist knots. We discuss the relationship between this invariant and the $SL(2, \mathbb{C})$ -invariant. (Received January 27, 2006)