1050-53-13   **R Goldin**, **M Harada** and **T Holm*** (`tsh@math.cornell.edu`), Department of Mathematics, Cornell University, Ithaca, NY 14853-4201, and **T Kimura**. *The Full Orbifold K-theory of Abelian Symplectic Quotients.*

In their 2007 paper, Jarvis, Kaufmann, and Kimura defined the full orbifold K-theory of an orbifold $\mathfrak{X}$, analogous to the Chen-Ruan orbifold cohomology of $\mathfrak{X}$ in that it uses the obstruction bundle as a quantum correction to the multiplicative structure. We give an explicit algorithm for the computation of this orbifold invariant in the case when $\mathfrak{X}$ arises as an abelian symplectic quotient. As an example, we discuss the full computation of the full orbifold K-theory of weighted projective spaces. Our computations hold over the integers, and in the particular case of weighted projective spaces, we may show that the associated invariant is torsion-free. (Received January 01, 2009)

1