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**Eduardo Gonzalez\***, Mathematics Department, 100 William T. Morrissey Boulevard, UMASS, Boston, MA 02125, and **B Uribe**. *On symplectic manifolds with semi-free circle actions and isolated fixed points*. Preliminary report.

Let  $X$  be a symplectic (Kähler) manifold with a semi-free circle action and isolated fixed points. A result of Tolman and Weitsman shows that  $X$  has the same cohomology type of a product of projective lines. Using Seidel's representation in quantum cohomology, one can show that  $X$  has the same quantum cohomology of a product of projective lines. Moreover,  $X$  is equivariantly isomorphic to a product of projective lines, if the (complex) dimension of  $X$  is less or equal than 3. In this talk I will discuss further evidence supporting that this result should hold in all dimensions. This is joint work with B. Uribe. (Received February 16, 2018)