1078-57-39 Yong Seung Cho* (yescho@ewha.ac.kr), Division of Mathematical and Physical Science,

College of Natural Sciences, Ewha Womans University, Seoul, 120-750, South Korea.

 ${\it Gromov-Witten\ invariants\ of\ symmetric\ products}.$

Gromov-Witten Invariants of Symmetric Products

Yong Seung CHO, Division of Mathematical and Physical Sciences, College of Natural Sciences, Ewha Womans University, Seoul 120-750, Republic of Korea E-mail: yescho@ewha.ac.kr

ABSTRACT:

In this talk we want to introduce Gromov-Witten invariants of the symmetric products of symplectic manifolds and their related properties. For these we investigate the moduli spaces of equivalence classes of stable J-holomorphic rational maps representing 2-dimensional homology classes in product spaces and symmetric products, and Gromov-Witten invariants and relative Gromov-Witten invariants on them. Also we want to relate the Gromov-Witten invariants and the quantum cohomologies of symmetric products with the symmetric invariant ones of product spaces. As an example we examine the symmetric product of the complex projective line, and compute a generating series of Gromov-Witten invariants for symmetric products. (Received November 06, 2011)