1020-14-136   **Anatoly Libgober*** (`libgober@math.uic.edu`), A.Libgober, Dept of Mathematics, University of Illinois at Chicago, 851 S.Morgan, Chicago, IL 60607. *Higher elliptic genera.*

This talk describes joint work with Lev Borisov extending two variable elliptic genus to non simply connected case. The main results include invariance of higher elliptic genera, parametrized by the cohomology classes of the fundamental group, in K-equivalences, a version of MacKay correspondence and existence of higher elliptic genera for varieties with Q-Gorenstein log-terminal singularities. (Received August 24, 2006)