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Huseyin Yuce* (yuceh@fiu.edu), Department of Mathematics, Florida International University, University Park, Miami, FL 33199. *The Fundamental Eigenvalue of the Biharmonic Boundary Value Problem on Circularly Periodic Domains.*

A boundary perturbation method is developed to extract the fundamental eigenvalue of the biharmonic boundary value problem on circularly periodic domains with clamped edge boundary conditions. Approximate analytical formulations of these eigenvalues are obtained. This is joint work with C.Y. Wang. (Received January 24, 2006)