1108-65-246 **Susanne C. Brenner**, **Peter B. Monk** and **Jiguang Sun*** (`jiguangs@mtu.edu`). *C0IPG Method for Biharmonic Eigenvalue Problems.*

We investigate the C0 interior penalty Galerkin (C0IPG) method for biharmonic eigenvalue problems with the boundary conditions of the clamped plate, the simply supported plate and the Cahn-Hilliard type. We prove the convergence of the method and present numerical results to illustrate its performance. We also compare the C0IPG method with the Argyris C1 finite element method, the Ciarlet-Raviart mixed finite element method, and the Morley nonconforming finite element method. (Received January 15, 2015)