Zhifu Xie*, Department of Mathematics and Computer Science, Petersburg, VA 23806, and Tiancheng Ouyang. Variational method with SPBC and periodic solutions in N-body problems. In this talk, we will present some new results by applying variational method with SPBC to prove the existence of periodic or quasi-periodic solutions in Newtonian N-body problem. Numerical simulations will also be presented. (Received August 28, 2014)