1135-35-1407   **Doyoon Kim*** (`doyoon_kim@korea.ac.kr`), Department of Mathematics, Korea University, 145 Anam-ro, Seongbuk-gu, Seoul, 02841, South Korea. *Boundary value problems for stationary Stokes system in weighted Sobolev spaces.*

We present the unique solvability of solutions in Sobolev spaces to the stationary Stokes system with variable coefficients on a bounded Reifenberg flat domain. We discuss both the Dirichlet boundary condition and the conormal derivative boundary condition. The solution spaces are Sobolev spaces with Muckenhoupt type weights. The coefficients are in the class of partially BMO functions so that, locally, they have no regularity conditions in one direction. This is based on joint work with Hongjie Dong and Jongkeun Choi. (Received September 21, 2017)