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**Alexander Pankov\*** ([alexander.pankov@morgan.edu](mailto:alexander.pankov@morgan.edu)), Mathematics Department, Morgan State University, Baltimore, MD 21251. *Monotone elliptic operators with nonstandard growth condition.*

In this talk we consider nonlinear, monotone, generally, multivalued elliptic operators that satisfy sufficiently general nonstandard growth condition. In particular, the so-called Lavrentiev phenomenon may occur. This means that, in general, smooth functions are not dense in the naturally defined Sobolev type space and, hence, such an operator possesses Dirichlet problems of many different types. In this talk we consider two extreme Dirichlet problems. The first main result is on the existence of solutions of such problems under natural assumptions. Then we consider various approximating problems and obtain some results on the convergence of approximate solutions. (Received February 20, 2017)