1128-32-13 **Debraj Chakrabarti*** (chakr2d@cmich.edu), Department of Mathematics, Central Michigan University, Mt Pleasant, MI 48859, and **Christine Laurent-Thiébaut** and **Mei-Chi Shaw**. *The $\overline{\partial}$-problem on annuli.*

An annulus is the domain between two pseudoconvex domains, the smaller of which, called the hole, is a relatively compact subset of the larger one. We show that the $\overline{\partial}$-operator from square integrable functions to square integrable $(0,1)$-forms has closed range for various classes of piecewise smooth holes. This is then used to obtain new Sobolev estimates on the $\overline{\partial}$-problem on piecewise smooth domains. (Received November 28, 2016)