1056-47-1375 **Meghna Mittal*** (mittal@math.uh.edu). *Function Theory on a Quantum Domain.*

In this talk, we will present an idea of quantizing the function theory on a family of complex domains. To give a brief description, whenever one replaces scalar variables by operator variables in a problem or definition, then this process is often referred as quantization. In some sense this process has been carried out for domains such as polydisk, ball, half planes and others by various authors. We approach these ideas via operator algebra methods to obtain existing and some "nice" new results. This talk is based on joint work with Vern Paulsen. (Received September 22, 2009)