Shuwen Lou* (slou1@luc.edu). Brownian motion with drift on spaces with varying dimension. In an earlier work, Brownian motion (without drift) on a concrete example of spaces with varying dimension has been studied. Such a space models a big square with a flag pole. In this talk, we introduce Brownian motion with drift on spaces with varying dimension (BMVD with drift), which can be defined in terms of a regular Dirichlet form which is not necessarily symmetric. Using Duhamel’s Principle, it can be established that the transition density of BMVD with drift has the same type of Gaussian bounds as that for BMVD without drift. (Received February 05, 2019)