**Zhiqin Lu\*** (zlu@uci.edu), Department of Mathematics, UC Irvine, Irvine, CA 92697. On the essential spectrum of complete Riemannian manifolds.

In this talk, we provide new criteria of a complex number being the essential spectrum of the Laplacians on functions and forms. This is joint work with N. Charalambous. (Received September 04, 2012)