

**Analysis Seminar Thursday April 30, 2015**

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**Title:** *Closed range composition operators on the Bergman space*

**Abstract:** Let  $\phi$  be a holomorphic self map of the unit disk  $\mathbb{D}$ . Associate to  $\phi$  the composition operator  $C_\phi$  defined by  $C_\phi f = f \circ \phi$ . We give necessary and sufficient conditions for the composition operator to have closed range on the Bergman space  $A^2$ . The pull-back measure of area measure on  $\mathbb{D}$  plays an important role. This talk is based on joint work with Pratibha Ghatage.