

# Analysis and Data Science Seminar

RONGWEI YANG

## A BRIEF SURVEY ON THE HARDY SPACE OVER THE BIDISC PART II

Tuesday, April 21, 2026  
3:00 P.M. in Massry B012

ABSTRACT. The classical Hardy space  $H^2(\mathbb{D})$  consists of square integrable functions on the unit circle that have analytic extensions into the unit disk  $\mathbb{D}$ . It is the birthplace of many important theories in analysis: analytic function theory, Toeplitz operators and algebras, operator model theory, Brown-Douglas-Fillmore (BDF) theory, just to name a few. Despite formidable challenges, effort of extending the study from  $H^2(\mathbb{D})$  to the Hardy space over the bidisc  $H^2(\mathbb{D}^2)$  has garnered significant success in recent decades. This talk will offer a brief account of this journey. It is accessible to graduate students.