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**Commutants of Toeplitz operators with separately radial polynomial symbols  
on the Fock space**

**Abstract**

My talk concerns commuting Toeplitz operators on the Fock space  $\mathcal{F}_n^2$ . Let  $\varphi$  be a separately radial polynomial in  $z$  and  $\bar{z}$  in  $\mathbb{C}^n$ . Then the Toeplitz operator  $T_\varphi$  is diagonal with respect to the standard orthonormal basis of  $\mathcal{F}_n^2$ . We obtain a characterization of polynomially bounded functions  $\psi$  for which  $T_\psi$  commutes with  $T_\varphi$ . Substantially different from the radial case, the characterization depends highly on the behavior of the polynomial  $\varphi$ . I will discuss several examples and consequences of our result. This is joint work with Amila Appuhamy.

Talk time: 07/18/2016 3:30PM— 07/18/2016 3:50PM  
Talk location: Cupples I Room 215

Special Session: Toeplitz operators and related topics. Organized by S. Grudsky and N. Vasilevski.