

Anthony To-Ming Lau,
University of Alberta

Title of talk: A separation property of positive definite functions on locally compact groups.

Abstract: Let G be a locally compact group. A complex-valued function ϕ on G is called *positive definite* if for any x_1, \dots, x_n in G and complex numbers c_1, \dots, c_n , the sum

$$\sum_{i,j=1}^n c_i \overline{c_j} \phi(x_i x_j^{-1}) \geq 0.$$
 In this talk, I shall discuss a separation property of a closed subgroup H of G by continuous positive definite functions and its relation with other properties on the Fourier algebra $A(G)$ and the group von Neumann algebra $VN(G)$ generated by left translations on $L^2(G)$.