

1086-VO-2844 **Ping Xu*** (pingxu2@illinois.edu). *An Elementary Proof of Ramanujan's Circular Summation Formula and its Generalizations.*

In this talk, I will give the idea of a completely elementary proof of Ramanujan's circular summation formula of theta functions and its generalizations given by S. H. Chan and Z. -G. Liu, who used the theory of elliptic functions. In contrast to all other proofs, our proofs are elementary. An application of this summation formula is given. (Received September 25, 2012)