

1154-11-2159      **Junehyuk Jung\*** (junehyuk@gmail.com), Department of Mathematics, College Station, TX  
77843. *On the sparsity of positive-definite automorphic forms.*

Roughly speaking, we say that an automorphic form is positive-definite if the corresponding automorphic L-function when restricted to the critical line is a positive-definite function. It is known that most of automorphic forms of small conductor are positive-definite, including the Riemann zeta function. In fact there are infinitely many positive-definite automorphic forms. Together with Sug Woo Shin, we however proved that in any reasonable family of automorphic forms, their natural density is in fact 0. I'm going to explain briefly what the idea of proof is. (Received September 17, 2019)