1037-60-226 Kimiaki Saito* (ksaito@ccmfs.meijo-u.ac.jp), Shiogamaguchi 1-501, Tenpaku, Nagoya, 468-8502, Japan. A Gauss-Poisson correspondence and infinite dimensional Laplacians.

In this talk we present recent results on infinite dimensional Laplacians. In particular, by introducing the operator which transfers from regular white noise functionals into functionals of exponential white noise, we give a relationship between an infinite dimensional Fourier-Gauss transform and the Lévy Laplacian. The operator implies a Gauss-Poisson correspondence if we consider the Lévy Laplacian acting on generalized multiple Wiener integrals by a Lévy process.

(Received February 03, 2008)