

March 18, 2015: Koichi Kaizuka (University of Gakushuin), *Asymptotic properties of solutions of the Helmholtz equation on symmetric spaces of noncompact type*. **Followed by dinner.**

We consider the Helmholtz equation on symmetric spaces of noncompact type. Typical examples of symmetric spaces of noncompact type are hyperbolic spaces and bounded symmetric domains. Our approach is based on harmonic analysis on symmetric spaces. By the Helgason Fourier transform and the elementary spherical function, we study asymptotic behavior of solutions of the Helmholtz equation at infinity. We also give a characterization of the solution space of the Helmholtz equation in terms of the Poisson operator and the resolvent for the Laplacian.