1125-22-585 **Toshiyuki Kobayashi*** (`toshi@ms.u-tokyo.ac.jp`), The University of Tokyo, Komaba, Tokyo, Japan, Tokyo, 153-8914, Japan. *Conformally Covariant Symmetry Breaking Operators on Differential Forms and Some Applications.*

We discuss restrictions of irreducible representations to reductive subgroups with focus on geometric question:

1. Classification of confomally covariant symmetry breaking operators on differential forms.

If time permits, we shall also discuss the following related questions for orthogonal groups of rank one:

2. Period of irreducible unitary representations.

3. Occurrence of complementary series representations in branching laws.

Refereces

T. Kobayashi. A program for branching problems in the representation theory of real reductive groups. Progr. Math. vol. 312, pp. 277–322, 2015.

T. Kobayashi, T. Kubo, and M. Pevzner, Conformal symmetry breaking operators for differential forms on spheres, viii+192 pages. Lecture Notes in Mathematics, vol. 2170, 2016.

T. Kobayashi and B. Speh. Symmetry Breaking for Representations of Rank One Orthogonal Groups, Memoirs of Amer. Math. Soc. 238. 2015. 118 pages. (Received September 19, 2016)