Domains of Discontinuity for Anosov representation

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Abstract. Anosov representations extend the class of convex cocompact representations from Lie groups of rank one to higher rank Lie groups as e.g. SL(n,R) or SL(n,C). I will describe a construction of cocompact domains of discontinuity for Anosov representation. Then I will discuss three applications: 1) Realizing higher Teichmueller spaces as deformation spaces of geometric structures, 2) Compactifying proper actions on symmetric spaces, and 3) Constructing compact Clifford-Klein forms of homogeneous spaces. This is joint work with O. Guichard.