## Oberseminar Geometrie und Topologie

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## Orbits of Hermann actions and symmetric triads

21. Mai 2019 - 16.15 Uhr Seminarraum IGT, Raum 7.530, Pfaffenwaldring 57

Abstract: Let  $(G, K_1)$  and  $(G, K_2)$  be symmetric pairs of compact type. The isometric action of  $K_2$  on the compact symmetric space  $G/K_1$  is called a Hermann action. Orbits of Hermann actions provide an important class of homogeneous submanifolds in compact symmetric spaces. In this talk, we study geometric properties of orbits of Hermann actions, such as minimal submanifolds, biharmonic submanifolds, and weakly reflective submanifolds. The main tools of our argument are symmetric triads, which are a generalization of root systems introduced by Ikawa.

