

- **Amann, Manuel: On the topology of transitive and cohomogeneity one actions (204)**

Homogeneous spaces and manifolds of cohomogeneity one, i.e. manifolds admitting isometric actions with a one-dimensional orbit space, form rather important classes and, most importantly, rich sources of examples in Riemannian geometry. They are particularly of interest in the field of non-negative curvature metrics. Despite their significance, they still leave a lot of room for open questions. In this talk I shall illustrate how on the one hand side we can answer classical questions from equivariant cohomology (such as “equivariant formality”) for new manifold subclasses. On the other hand—motivated by the manifold counterpart and by the point of view of non-negative sectional curvature — we shall discuss questions related to the topology and equivariant cohomology in the singular framework of cohomogeneity one A