

Equivariant indices of 1-forms on varieties.

For a G -invariant holomorphic 1-form with an isolated singular point on a germ of a complex-analytic G -variety with an isolated singular point (G is a finite group) one has notions of the equivariant homological index and of the (reduced) equivariant radial index as elements of the ring of complex representations of the group. During my talk I will show that on a germ of a smooth complex-analytic G -variety these indices coincide. This permits to consider the difference between them as a version of the equivariant Milnor number of a germ a G -variety with an isolated singular point.

The talk is based on a joint work (arXiv:1701.01827) with Sabir M. Gusein-Zade.