

Universidad Complutense de Madrid  
Facultad de Ciencias Matemáticas  
Departamento de Álgebra

Teléfono: 91 394 45 70, Fax: 91 394 46 62  
Correo electrónico: Algebra@mat.ucm.es

## SEMINARIO DE GEOMETRIA ALGEBRAICA

Jueves, 18 de mayo de 2017, **12:00**, Seminario 238

**Sabir M. Gusein-Zade**

Universidad de Moscú

Impartirá la conferencia

### Homological indices of collections of 1-forms

*Resumen.*

Homological index of a holomorphic 1-form on a complex analytic variety with an isolated singular point is an analogue of the usual index of a 1-form on a non-singular manifold. One can say that it corresponds to the top Chern number of a manifold. We offer a definition of homological indices for collections of 1-forms on a (purely dimensional) complex analytic variety with an isolated singular point corresponding to other Chern numbers. We also define new invariants of germs of complex analytic varieties with isolated singular points related to "vanishing Chern numbers" at them. (This is a joint work with Eugene Gorsky).