



Departamento  
de Álgebra



# CURSO DE DOCTORADO

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### Topological studies with a view Towards Artin-Laufer program of normal Surface singularities

The Artin-Laufer program of normal surface singularities has a long history, started with the work of Artin in the 60's and continued by Laufer in the 70's. The program targets topological characterization (of analytic invariants) of normal surface singularities. In the beginnings, the case of rational and elliptic singularities were completely clarified by the works of Artin, Laufer, Wagreich, S. S.-T. Yau and Némethi. In order to continue the program for more complicated singularities, one has to find 'good' topological candidates for analytic invariants. This idea led to the birth of new topological concepts such as lattice cohomology and topological Poincaré series associated with normal Surface singularities.

The aim of the course is, on one hand, to introduce and give an overview of the Artin-Laufer program, and, on the other, to explain some recent topological results and their influence on the program.

Organizado por el Departamento de Álgebra en colaboración  
con el Instituto de Matemática Interdisciplinar (IMI)

**Fechas: 12, 13, 14 y 15 de diciembre de 2016**

**Horario: de 11 a 13 horas**

**Lugar: Seminario 238**

**Facultad de CC Matemáticas, UCM**