

## **On some conjectures about free and nearly free divisors**

Abstract: In this talk infinite families of examples of irreducible free and nearly free curves in the complex projective plane which are not rational curves and whose local singularities can have an arbitrary number of branches are given. All these examples answer negatively to some conjectures proposed by A. Dimca and G. Sticlaru. Our examples say nothing about the most remarkable conjecture by A. Dimca and G. Sticlaru, i.e. every rational cuspidal plane curve is either free or nearly free. This is a joint work with E. Artal, L. Gorrochategui and I. Luengo.