Implicitization of canal surfaces

Marc DOHM

Université de Nice, França

A canal surface is defined as the envelope of a family of spheres moving along a space curve. In a recent preprint, Severinas Zube developed a geometric approach (based on Lie and Laguerre Sphere Geometry) to compute the implicit equation of such a surface as the resultant of a so-called mu-basis. In my talk, I will expose these result as well as an alternative method using linear algebra.