1070-32-224 Anne Pichon* (pichon@iml.univ-mrs.fr), Luminy, Case 907, Marseille, 13288. On the topology of non isolated singularities of complex surfaces.

To an analytic germ $f: (\mathbf{C}^3, 0) \longrightarrow (\mathbf{C}, 0)$, one can associate three classical underlying geometrical objects :

1) the link L_0 of the germ of complex surface (X, 0) with equation f = 0,

2) the link \hat{L}_0 of the normalization space of X, and

3) the boundary L_t of the Milnor fibre of $f^{-1}(0), t \neq 0$.

When f has an isolated singularity at 0, then it is well known that L_0, L_t and \tilde{L}_0 are diffeomorphic real 3-dimensional manifolds which are graphed in the sense of Waldhausen.

We study the case when the singular locus of f is a complex curve. In this case, these three spaces are in general not homeomorphic. A natural question is to describe them, and to compare them. I will present some results in this direction.

Our main result is that the boundary of the Milnor fibre L_t is a graphed manifold. I will sketch a proof of this this fact. I will also show through examples that L_t provides new 3-manifolds in complex geometry.

This is a joint work with Françoise Michel (University of Toulouse, France) (Received February 12, 2011)