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Nota di contenuto	1 Introduction -- 2 The topology of a hypersurface germ f in three variables Milnor fiber -- 3 The topology of a pair (f ; g) -- 4 Plumbing graphs and oriented plumbed 3-manifolds -- 5 Cyclic coverings of graphs -- 6 The graph GC of a pair (f ; g). The definition -- 7 The graph GC . Properties -- 8 Examples. Homogeneous singularities -- 9 Examples. Families associated with plane curve singularities -- 10 The Main Algorithm -- 11 Proof of the Main Algorithm -- 12 The Collapsing Main Algorithm -- 13 Vertical/horizontal monodromies -- 14 The algebraic monodromy of H1(¶ F). Starting point -- 15 The ranks of H1 (¶ F) and H1(¶ F nVg) via plumbing -- 16 The characteristic polynomial of ¶ F via P# and P# -- 18 The mixed Hodge structure of H1(¶ F) -- 19 Homogeneous singularities -- 20 Cylinders of plane curve singularities: f = f 0(x;y) -- 21 Germs f of type z f 0(x;y) -- 22 The T;;–family -- 23 Germs f of type ˜ f (xayb; z). Suspensions -- 24 Peculiar structures on ¶ F. Topics for future research -- 25 List of examples -- 26 List of notations.
Sommario/riassunto	In the study of algebraic/analytic varieties a key aspect is the description of the invariants of their singularities. This book targets the challenging non-isolated case. Let f be a complex analytic hypersurface germ in three variables whose zero set has a 1-dimensional singular

locus. We develop an explicit procedure and algorithm that describe the boundary M of the Milnor fiber of f as an oriented plumbed 3-manifold. This method also provides the characteristic polynomial of the algebraic monodromy. We then determine the multiplicity system of the open book decomposition of M cut out by the argument of g for any complex analytic germ g such that the pair (f,g) is an ICIS. Moreover, the horizontal and vertical monodromies of the transversal type singularities associated with the singular locus of f and of the ICIS (f,g) are also described. The theory is supported by a substantial amount of examples, including homogeneous and composed singularities and suspensions. The properties peculiar to M are also emphasized.