1070-57-73 **Lee Rudolph*** (`lrudolph@black.clarku.edu`), Department of Mathematics & Computer Science, Clark University, 950 Main Street, Worcester, MA 01610. *On the minimal degree of a transverse* **C***-link, with an application to topological slice genus of classical knots.* Preliminary report.

A *transverse* **C***-link in dimension* $2n+1$ is a pair (K, S^{2n+1}) isotopic to some (M, Σ), where $M = V \cap \Sigma$ for some complex hypersurface $V \subset \mathbf{C}^{n+1}$ having at most isolated singularities and some strictly pseudoconvex $(2n+1)$-sphere $\Sigma \subset \mathbf{C}^{n+1}$. Boileau & Orevkov showed that transverse **C**-links in dimension 3 coincide with the author's "quasipositive links", about which various things have been proved in the past 30 years. On the other hand little is known about transverse **C**-links in dimension $2n + 1 > 3$, not even just which 3-manifolds can be realized as K.

Let $\deg_{\mathbf{C}}(K, S^{2n+1})$ be the minimum degree of such a hypersurface V as above; let $\deg_{\mathbf{C}}(K)$ be the minumum $\deg_{\mathbf{C}}(K', S^{2n+1})$ over all transverse **C**-links with K' diffeomorphic to K (preserving orientation). These seemingly banal invariants actually have some interest. (1) Boileau and the author (unpublished) found many links M^3 of surface singularities in $\mathbf{C}^3$ with $\deg_{\mathbf{C}} M < \deg(V)$ for any V having that singularity. (2) $\deg_{\mathbf{C}}(K, S^3)$ bounds can sometimes determine the *topological*(ly locally flat) slice genus of a knot (K, S^3)—e.g., $g_t(8_{18}) = 3 = g_t(9_{40})$. (Received January 27, 2011)