1163-53-559   **Thomas E. Mark*** (`tmark@virginia.edu`), PO Box 400137 Kerchof Hall, Charlottesville, VA 22904, and **Bülent Tosun**. *On hypersurfaces of contact type in $\mathbb{R}^4$.*

In recent joint work with Bülent Tosun, we proved that no Brieskorn homology sphere can be embedded as a hypersurface of contact type in standard symplectic 4-space. This implies that no rationally convex domain in C^2 has boundary diffeomorphic to a Brieskorn sphere. I will provide some background and context for these results, including some hints toward the proof, which is based on an obstruction coming from Heegaard Floer homology. (Received September 09, 2020)