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Jean Gutt and **Michael Usher*** (usher@uga.edu). *Knotted symplectic embeddings between domains in R^4 .*

I will discuss a proof that many toric domains $X \subset R^4$ admit symplectic embeddings f into dilates of themselves which are knotted in the strong sense that there is no symplectomorphism of the target that takes $f(X)$ to X . For instance X can be taken equal to a polydisk $P(1,1)$, or to any convex toric domain that both is contained in $P(1,1)$ and properly contains a ball $B^4(1)$; by contrast a result of McDuff shows that $B^4(1)$ (or indeed any four-dimensional ellipsoid) cannot have this property. The embeddings are constructed based on recent advances on symplectic embeddings of ellipsoids, though in some cases a more elementary construction is possible. The fact that the embeddings are knotted is proven using filtered S^1 -equivariant symplectic homology. (Received July 27, 2017)