Topological properties of monotone complexity one spaces

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A driving (meta)question in symplectic geometry is to understand the extent to which compact symplectic manifolds differ from complex projective (or *Kähler*) smooth varieties. This problem can be refined by imposing further conditions: for instance, we may ask how compact monotone symplectic manifolds differ from smooth Fano varieties. While it is known that there are examples of the former that cannot be *Kähler* and, hence, Fano (due to Reznikov, in real dimension 12), only recently have people started asking this question in the presence of a Hamiltonian torus action. Motivated by very recent results by Lindsay and Panov in dimension 6 in the presence of a Hamiltonian S^1-action, the aim of this talk is to prove that monotone compact symplectic 2n-dimensional manifolds endowed with a Hamiltonian T^{n-1}-action (for any n) enjoy some topological properties that their Fano counterparts do.