

# Toric geometry with elliptic singularities

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Motivated by the study of generalized complex structures, elliptic symplectic structures were introduced by Cavalcanti and Gualtieri. These are symplectic forms with singularities along codimension-two submanifolds. They fit in the larger class of symplectic structures on Lie algebroids, which have received considerable attention in the past decade. Elliptic symplectic structures are supported by singular fibrations, which are surprisingly the same types of maps as moment maps in (semi)toric geometry. In this talk I will study elliptic symplectic structures for which this fibration is induced by a torus action and has Lagrangian fibres. This gives rise to a notion of toric symplectic structures with elliptic singularities, similar to toric symplectic structures with logarithmic singularities as studied by Gualtieri-Li-Pelayo-Ratiu. Based on joint work with Gil Cavalcanti and Ralph Klaasse.