



# Jan Wehrheim (IRMA Strasbourg) Vortex invariants and toric manifolds

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We consider the symplectic vortex equations for a linear Hamiltonian torus action. We show that the associated genus zero moduli space itself is homotopic (in the sense of a homotopy of regular G-moduli problems) to a toric quotient with combinatorial data directly obtained from the original torus action. Applications of this include a simplified computation of the quantum cohomology of a toric manifold, as well as a simplified proof of the wall crossing formula of Cieliebak and Salamon for the computation of vortex invariants.

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