Chern-Einstein metrics on symplectic manifolds

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Abstract: Given a symplectic manifold (M, ω) and a compatible almost-complex structure on it, the induced (almost-Kähler) metric g on M is said to be Chern-Einstein if there exists a real constant λ such that $\rho = \lambda\omega$, where ρ is the Chern-Ricci form of g.

We will discuss the existence of Chern-Einstein metrics on symplectic manifolds, focusing on a large class of non-Kähler examples given by adjoint orbits of semi-simple Lie groups. Part of presented results come from a joint work with Alice Gatti (LBNL).