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Jeff Streets*, 11 WHEATLEY CT, IRVINE, CA 92617. *Classification of generalized Ricci solitons on complex surfaces.*

In joint work with G. Tian we introduced an extension of Kahler-Ricci flow to complex manifolds, called pluriclosed flow, aiming to associate canonical geometric structures to complex manifolds beyond the Kahler setting. A fundamental issue is to understand the possible fixed points of the flow, or more generally, soliton solutions. I will prove that nontrivial soliton structures can only occur on Hopf surfaces, and then construct such solitons on Class 1 Hopf surfaces using a symmetry ansatz. (Received August 23, 2018)