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Eric Bucher* (buchere1@xavier.edu), OH , and **John Machacek**. *Locally acyclic cluster algebras and reddening sequences.*

In this talk we show that a reddening sequence exists for any quiver which is Banff. The proofs are combinatorial and rely on the direct sum construction for quivers. In general, Banff quivers define locally acyclic cluster algebras which are known to coincide with their upper cluster algebras. The existence of reddening sequences for these quivers is consistent with a conjectural relationship between the existence of either a maximal green or reddening sequence and a cluster algebra's equality with its upper cluster algebra. Moreover, this completes a verification of the conjecture for Banff quivers. (Received September 21, 2021)