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Kelly Bickel* (kelly.bickel@bucknell.edu), **James Pascoe** and **Alan Sola**. *Singular Rational Functions on the Polydisk.*

Rational inner functions (RIFs) on the bidisk have well-understood behavior near their boundary singularities; in particular, many things are known about their derivative integrability, zero and unimodular level set behavior, and non-tangential regularity. In this talk, I will discuss singular RIFs in dimensions three and higher, with a focus on degree $(1, m, n)$ RIFs on the tridisk. While some two-variable results generalize, non-trivial RIF examples will show that much of the nice behavior seen in the two-variable case is lost in higher dimensions. Time permitting, I will discuss recent explorations concerning rational (not necessarily inner) functions on the bidisk. (Received August 09, 2019)