Michael T. Annunziata, Courtney R. Gibbons and Cole Hawkins*, colepshawkins@gmail.com, and Alexander J. Sutherland. Rational Combinations of Betti Diagrams of Complete Intersection Modules.

We investigate decompositions of Betti diagrams over a polynomial ring within the framework of Boij-Soderberg theory. That is, given a Betti diagrams, we determine if it is possible to decompose it into the Betti diagrams of complete intersections. To do so, we determine the extremal rays of the cone generated by the diagrams of complete intersection modules and provide an exponential-time algorithm for decomposition. (Received September 11, 2016)