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*Barile-Macchia resolutions for monomial ideals*

We develop an algorithm to create homogeneous acyclic matchings for any given monomial ideal. Via discrete Morse theory, they induce cellular resolutions for this ideal, which we call Barile-Macchia resolutions. These resolutions are minimal for edge ideals of weighted oriented forests and (most) cycles. As a result, obtain recursive formulas for graded Betti numbers and projective dimension. Furthermore, we compare Barile-Macchia resolutions to those created by Batzies and Welker and some well-known simplicial resolutions. Under certain assumptions, whenever the above resolutions are minimal, so are Barile-Macchia resolutions.