Title: Matchings in hypergraphs and Castelnuovo–Mumford regularity

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In this paper, we introduce and generalize to hypergraphs some combinatorial invariants of graphs such as matching number and induced matching number. Then we compare them and present some upper bounds for the regularity of the Stanley–Reisner ring of $\Delta_{\mathcal{H}}$ for certain hypergraphs $\mathcal{H}$ in terms of the introduced generalizations of matching numbers.

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