

Year: 2017

Vol.: 91

Fasc.: 3-4

Title: Matchings in hypergraphs and Castelnuovo–Mumford regularity

Author(s): Somayeh Moradi and Fahimeh Khosh-Ahang

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.

Address:

Somayeh Moradi
Department of Mathematics
School of Science
Ilam University
P. O. Box 69315-516
Ilam
Iran

Address:

Fahimeh Khosh-Ahang
Department of Mathematics
School of Science
Ilam University
P. O. Box 69315-516
Ilam
Iran