Title: Edge-counting vectors, Fibonacci cubes, and Fibonacci triangle

Author(s): Sandi Klavžar and Iztok Peterin

Edge-counting vectors of subgraphs of Cartesian products are introduced as the counting vectors of the edges that project onto the factors. For several standard constructions their edge-counting vectors are computed. It is proved that the edge-counting vectors of Fibonacci cubes are precisely the rows of the Fibonacci triangle and that the edge-counting vectors of Lucas cubes are F_{n-1}-constant vectors. Some problems are listed along the way.

Address:
Sandi Klavžar
Department of Mathematics and Computer Science
FNM, University of Maribor

E-mail: sandi.klavzar@uni-mb.si

Address:
Iztok Peterin
Institute of Mathematics and Physics
FEECS, University of Maribor
Smetanova ulica 17
2000 Maribor
Slovenia
E-mail: iztok.peterin@uni-mb.si