

Deza graphs and digraphs

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Erickson, Fernando, Haemers, Hardy and Hemmeter introduced Deza graphs in 1999 as a generalization of strongly regular graphs (see [2]). Deza digraphs were introduced in 2003 by Zhang and Wang (see [3]) as a directed graph version of Deza graphs, that also generalize the notion of directed strongly regular graphs. In this talk we'll give basic definitions and properties of Deza graphs and Deza digraphs and present several constructions. We'll also present a variation of directed Deza graphs, called directed Deza graph of type II, that is introduced in [1].

References

- [1] D. Crnković, H. Kharaghani, S. Suda, A. Švob, New constructions of Deza digraphs, preprint, arXiv:2001.07281v2.
- [2] M. Erickson, S. Fernando, W. H. Haemers, D. Hardy, J. Hemmeter, Deza graphs: A generalization of strongly regular graphs, *J. Combin. Des.* 7 (1999), 395–405.
- [3] G. Zhang, K. Wang, A directed version of Deza graphs – Deza digraphs, *Australasian J. Combin.* 28 (2003), 239–244.