



## PETRA ŠPARL (1975–2016)

Petra Šparl passed away on 21st August 2016 after an unfair battle against severe cancer. She fought the cancer with incredible courage for over a year, and those who knew her sincerely hoped that she would be among the few who might overcome the disease. She left two children, Alja and Žiga, aged 14 and 12. Petra studied mathematics at the University of Maribor, where she received her bachelor's degree in 1998, her MASc in 2001, and her PhD degree in 2005. In her thesis, Petra developed an algorithm for multicolouring on a special class of graphs, called hexagonal graphs, and this is still achieving the best approximation bound among 2-local algorithms. During her PhD studies she taught at the Faculty of Civil Engineering, and while she was writing her PhD thesis, she was also involved in renovating the mathematical curricula for civil engineering students, and introducing some fresh topics in discrete mathematics. Soon after completing her PhD, Petra joined the Faculty of Organisational Sciences, where she was immediately asked (with



some urgency) to develop the curricula for mathematical subjects. At the same time, she started a successful collaboration with colleagues in the new Faculty, which resulted in several publications on several different topics. Graph theory remained one of her major research interests. For example, in December 2015 she was working on the final version of her last paper, on matching in hexagonal graphs [1]. This year Petra co-authored a paper in *Ars Mathematica Contemporanea*, which initiated the study of multicolourings of 3D-analogues of planar hexagonal graphs [2]. The motivation for the studying multicolourings of hexagonal graphs is derived from the recently very popular problems of channel assignment, which have appeared in wireless networking. Petra loved to see the successful application of serious mathematics. She also had the necessary energy and skills to bring mathematics closer to engineering students. Petra was at the peak of her potential when she had to start a fight for her life. Who knows what more she would have achieved if she had not left us so young. I am very proud that Petra was my PhD student.

Janez Žerovnik

### References

- [1] R. Erveš and P. Šparl, Maximum Induced Matching of Hexagonal Graphs, *Bull. Malays. Math. Sci. Soc.* **39** (2016), 283–295.
- [2] P. Šparl, R. Witkowski and J. Žerovnik, Multicoloring of cannonball graphs, *Ars Math. Contemp.* **10** (2016), 31–44.