



Mirka Miller (née Koutova)

9 May 1949 – 2 January 2016

**‘A refugee from behind the iron curtain
became the Mother of Indonesian Graph Theory’**



With the passing of Mirka Miller, on Saturday 2 January 2016, the mathematics community has lost a respected colleague and a dear friend. Mirka is survived by her son Filip, her life partner Joe Ryan, and her siblings Alena, Jiří, Ivana, Zdenek and their families in the Czech Republic.

In reflecting upon Mirka’s accomplishments, one not only is impressed by her dedication and drive to achieve great things, but her generosity in sharing these successes and encouraging others to excel.

Mirka Koutova was born on 9 May 1949 and grew up in Bohemia. From an early age Mirka’s academic and sporting talents were recognised and nurtured, leading to a lifelong love for mathematics and volleyball, two fields in which she excelled. On finishing her secondary education, Mirka enrolled in Charles University where she majored in Mathematics.

With the advent of the Russian invasion in 1968, Mirka made the difficult decision to leave her much loved home, and seek refugee status. Unfortunately these actions

brought Mirka to the attention of the Czechoslovakia administration and prior to the Velvet Revolution she was declared a criminal under the threat of two years imprisonment if she returned to Czechoslovakia. It was not until 1990 that this sentence was annulled and Mirka was able to return to her homeland, and visit with her immediate family.

In 1969 when Mirka travelled from Prague to Sydney, via Vienna, she knew no English nor any Sydney-siders, save her fellow refugees. Sydney and Australia must have presented somewhat of a cultural shock!

In keeping with her fun-loving nature, Mirka credited Agatha Christie with her rapid progress in grasping the English language, but all those who came to know Mirka would credit this to her interest in others and her willingness to listen and converse.

After mastering English, Mirka enrolled in a Bachelor of Arts at Sydney University, majoring in Mathematics and, with great foresight, the then fledgling course, Computer Science. Mirka graduated with a BA in 1976.

While studying, Mirka maintained her passion for volleyball, playing for the SOKOL club in French's Forest, representing New South Wales and then wearing the 'green and gold' for Australia.

In 1975 Mirka started work as a programmer for the Sydney Morning Herald and married ornithologist Dr Ben Miller, and her son Filip was born in the following year. In 1978 the family moved to Lord Howe Island where, as a contract programmer for the NSW National Parks and Wildlife Service, she supported the family and contributed to the successful fight to save the Lord Howe Island woodhen from extinction. With further changes in her personal life and the end of her marriage, Mirka returned to the Australian mainland, seeking a better life for herself and her son, finding happiness with her soul mate Joe Ryan.

Mirka's drive for excellence saw her return to study and she was awarded a Masters of Letters in 1983 and Master of Arts in 1986 from the University of New England. Through this dedication, Mirka redirected her career, lecturing at the University of New England from 1986 until 1991. Never one to rest on her laurels, Mirka gained a PhD from the University of New South Wales in 1990, studying externally under the supervision of Professor Jennifer Seberry. In 1992 Mirka and family moved to Newcastle University, where she started as a Senior Lecturer in the Department of Computer Science and rapidly rose to Associate Professor and Assistant Dean of Postgraduate Studies. For a number of years Mirka was the only female academic staff member in the Faculty of Engineering at Newcastle University. Mirka's outstanding academic contribution was recognised in 2004 when the University of Ballarat (now Federation University Australia) appointed her as Professor of Computer Science. Mirka continued her quest to contribute at a high level, returning to a research-only position as Professor in the Faculty of Engineering and Built Environment, Newcastle University, in 2008, and later, in 2014, as Emeritus Professor in the School of Mathematics and Physical Sciences.

Mirka's achievements were acknowledged worldwide with the award of a Leverhulme visiting Professorship and a Marie Curie Fellowship at King's College, London. From 2002 onwards she held the position of Conjoint Professor of Mathematics at the University of West Bohemia, Pilsen, Czech Republic. She was twice UNESCO visiting Professor at ITB, Indonesia, and through these positions she supported academics worldwide by co-organising CIMPA-UNESCO schools in Indonesia (2007), Laos (2014) and Havana (2016).

Mirka was the driving force in a large number of research grants including several ARC grants with the most recent one for the years 2016–2018. She co-authored over two hundred academic publications in scholarly journals and approaching twenty books, book chapters and proceedings. She founded four successful series of workshops (IWOCA, IWONT, IWOGL and GraphMasters).

When collaborating with Mirka one was struck by her generosity of ideas and her drive to foster young mathematicians, where her passion and talent for mathematics was infectious. Mirka supervised twenty PhD students to completion and, at the time of her death, she was supervising four PhD candidates, two Research Masters students and two post-doctoral researchers. Mirka's support for others extended beyond her own students to students from China, Cuba, the Czech Republic, India, Indonesia, Laos, Spain and Vietnam as well as from Australia. Mirka showed particular support for female mathematicians, with six of her former and present PhD students being female, a remarkable statistic in Mathematics.

Mirka had a strong affinity with colleagues from Indonesia, with her six Indonesian graduates being among the most productive researchers in the Indonesian Mathematics Community where she is fondly referred to as the Mother of Indonesian Graph Theory.

As we fondly remember Mirka, the quality that is at the forefront of our mind is a generous academic who sought to engage all around her, using her talents and ingenuity to take everyone forward. Mirka is very sadly missed by her many friends from Australia, the Czech Republic and around the world.

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