



Obituaries

Pavel Karel Smrz

10 December 1937 to 26 July 2014



Paul Smrz was born in Prague on 10 December 1937. He graduated from Jan Neruda High School in 1956 and from Charles University in 1960 majoring in physics. From 1961 to 1962 he was a research assistant in the High Energy Physics Laboratory of the Physics Institute of the Czechoslovak Academy of Sciences and began studying for his doctorate in nuclear physics. He married Eva in March 1961 and their son Michal was born in December of that year. From 1962 to 1965 he was a research assistant in the Joint Institute for Nuclear Research in Dubna, USSR. He took his doctorate from Charles University in 1965. His 13 research publications up to this time were in nuclear physics specialising in the collision of elementary particles. Paul's colleague at Dubna, Pavel Winternitz, says that Paul's most interesting and best received papers for this period were on Cherenkov radiation.

Back in Prague in 1965, Paul had to spend six months in military service. But then he was granted a two-year Canadian National Research Council post-doctoral fellowship at McGill University Physics Department. The Czechoslovak authorities had given him an exit visa for one year but when trying to extend it for 1966 he was told that he should return to Czechoslovakia. He decided then to stay in Canada to continue his research at McGill. This was a big step because it meant that he would not be able to return safely to his homeland to visit relatives. Clearly there was some concern in both countries because of Paul's research experience in the USSR.

In 1967 Paul's daughter Marcella was born in Canada. From 1967 to 1970, Paul was a postdoctoral fellow at the University of Alberta, Edmonton, but he began his teaching career as assistant professor from 1970 to 1971 at the University of Lethbridge, Alberta. During his stay in Canada, his research interests switched to general relativity and fundamental questions of space-time. He was interested in the underlying differential geometry and related quantum theory.

In 1971 Paul was offered a lectureship in mathematics at the University of Newcastle, Australia. He came by the ship Orsova bringing children Michal and Marcella and wife Eva pregnant with Hanna who was to be born in Australia. Paul and his family settled into Australia, their new homeland. Paul enjoyed teaching and was an accomplished lecturer in a variety of subjects mainly linear algebra but also statistics. His enthusiastic lecturing style was appreciated by his students. He was promoted almost immediately to senior lecturer and to an associate professorship in 1978. His delight was in lecturing to honours students on differential geometry. His research in general relativity was mainly carried out without collaboration.

Paul had several half-year periods of study leave when he caught up with the international research community. These included the universities of Waterloo Canada in 1975, Canterbury New Zealand in 1977, Utah USA in 1977 and Catania Sicily in 1983. He participated and contributed to a number of international conferences. From 1985 to 1990 he served as Head of the Department of Mathematics, Statistics and Computer Science. Paul retired in 1997 on his sixtieth birthday.

Paul had his share of personal tragedy with the loss of his daughter Marcella and his wife Eva. But he had a time of rejoicing with his marriage to Zdena in 2001 and the birth of his grandson Adrian in 2004.

Paul enjoyed walking in the Australian bushland. In the Hunter Valley his favourite was walking on Barrington Tops. But he also enjoyed exploring and camping in the Australian outback. On several occasions he persuaded overseas visitors to go with him. Zdena's introduction to Australia included several of Paul's outback safaris. He actually brought his brother Lada out from the Czech Republic to experience the joys of an outback expedition.

In his retirement Paul's life followed a pattern. He divided his year, spending time in the Czech Republic with his wife Zdena and his brother Lada, in Canada with Zdena's family in Ottawa and in Australia with his family and old maths colleagues in Newcastle. As a conjoint associate professor he kept a desk at the University of Newcastle and continued his research activity in particular with colleagues from North America.

From 1967 he published over 30 papers on general relativity. His 2007 paper gives a flavour of his research efforts: 'General relativity is extended by considering a torsion-free de Sitter reducible metric linear connection on a five dimensional manifold'. Paul Winternitz writes: 'what I appreciated most about Paul's work was his independent "out of the box" thinking and his originality in tackling profound aspects of mathematical physics'.

Paul was prepared to do collaborative research on wider fields. He renewed his collaboration with his old Czech colleague Robert Holub. They worked on an anomalous phenomenon discovered by earth scientists. They proposed that it might be a macroscopic quantum effect which occurs rarely but is nevertheless observable.

In Canada, Paul had several short-term appointments and research collaboration at the University of Ottawa. Mayer Alvo, whose background is in statistics, writes: ‘We published a paper together involving the geometry of ranking data. We talked about the geometric representation of signed permutations, a very difficult problem. Paul had made some significant headway into it. While in Ottawa he would work incessantly coming up regularly with new ideas.’

Earlier this year Paul was diagnosed with bowel cancer. He died of complications after an operation on 26 July. He will be missed by his family, his research colleagues and his old friends from Mathematics at the University of Newcastle.

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