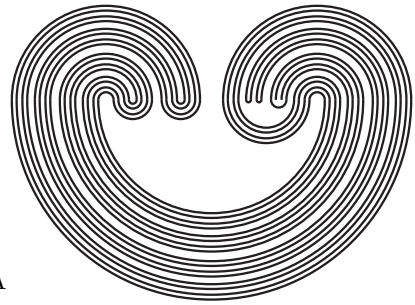
Topology Proceedings



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DEDICATION

At the Spring Topology and Dynamics conference held at the University of Southwestern Louisiana in 1997, it was decided that the following year the conference would be held at George Mason University. During the summer, just as the planning for the 1998 conference was beginning, Amer Bešlagić, one of the topologists at George Mason University, died in a mountain climbing accident in Wyoming. The 1998 conference was dedicated to Amer's memory. The following article is a very slight modification of one which was written, at Mel Henriksen's request, for the Top Com feature of the Topology Atlas.

AMER BEŠLAGIĆ, 1959-1997

Amer Bešlagić was born in Sarajevo in 1959. He went to the University of Sarajevo for his undergraduate education, and he received his Ph.D. from the University of Wisconsin in 1986 under the direction of Mary Ellen Rudin. After that he held positions at MSRI in Berkeley, University of Kansas, and Ohio University before coming to George Mason Univer sity in 1989. Amer stayed at George Mason University until his death in the summer of 1997.

Amer spent his thirty-eight years listening to music, watching movies, reading, playing basketball, hiking, mountain climbing, conversing with friends, working for human rights, and, of course, doing mathematics. The depth and breadth of his interests and abilities were extraordinary.

Amer was tall and very thin. His beard was carefully trimmed in such a way that he always looked as though he had not shaved in a week. He owned a sport coat and necktie, but few people ever saw him wearing them. He was usually dressed in shorts, a T-shirt, and sandals, although in very cold weather he replaced the shorts with blue jeans and the sandals with sneakers or boots. His casual attire hid a near obsession with cleanliness. Those of us who roomed with him at conferences or had him stay in our homes became aware of his practice of taking thirty or forty minute showers before he went to bed and again when he got up in the morning.

Amer could be blunt, and sometimes he got angry about what he perceived as absurd or arrogant or simply stupid behavior or words. However, despite his sometimes crusty demeaner, Amer was a truly kind, warm, generous person. He remembered birthdays; he expressed sincere concern when friends or co-workers were ill; if someone needed help moving, Amer could be counted on to be there. Amer enjoyed giving gifts: CD's or books or something from a new bakery he had found. Sometimes he would leave a present without saying whom it was from. He was capable of personifying clichés of generosity. One time I admired a T-shirt he was wearing. The next morning, he gave me the shirt with apologies for the one-day delay; he didn't want to give me the shirt before he had a chance to go home and launder it.

One of Amer's great passions was basketball. He built his teaching schedule around his basketball schedule. Typically he played three days a week at the gym at George Mason University, often for two or three hours at a time. He also played in at least one league at night. Some of his off-court time was spent nursing injuries he had received while playing. One got accustomed to seeing him walking around with an ice pack until he had a chance to sit down and apply it to whatever part of him needed it most at that particular time. He was not at all embarassed to admit that although he insisted on playing

with his injuries, he would have advised anyone else in a similar situation to take some time off.

Amer knew a great deal about many subjects, including history, music, politics, movies, and literature. If he found a recording or a book or a movie that he liked, he loved to share his impressions with others. One thing he did not do was watch television, not because he didn't want to, but because he was afraid he was a tv-aholic. He said that he got rid of his television when he found himself watching golf.

When war broke out in Bosnia, Amer became active in the movement for human rights in what had been his homeland. He spent hours sending e-mails and faxes and letters and talking on the telephone with others in the campaign. He often went to airports to welcome newcomers from what had been Yugoslavia, and he worked tirelessly to help the immigrants get settled. At one point he somehow got press credentials and was able to go to Sarajevo during a relatively quiet time. He came back with many slides and a tentative optimism that his city might survive. It was during his efforts for Bosnia that Amer met Vesna Rebernak, whom he married in May of 1996.

Amer was something of an adventurer. There is a videotape of him skydiving, taken by an instructor who was going down at the same time as Amer. In the video, Amer doesn't look particularly frightened. He also doesn't look particularly happy. He loved hiking in the mountains, especially those in the western United States. In May of 1997, he returned from climbing with many pictures and with a description of how at one point he had slipped on some ice and slid two hundred yards down a slope. The next month, climbing in Wyoming, he again slipped, but this time he did not survive. Our shock and sadness at his death were tempered only slightly by the realization that he died doing something he enjoyed in a place that he loved.

Amer was a brilliant mathematician, and his view of mathematics and mathematicians was somewhat skewed by this fact. He seemed to think that if he could prove something easily, then everyone should be able to prove the result just as easily. If someone worked harder than necessary to prove something, he described them as incompetent–for Amer, the line between incompetence and imperfection was quite narrow. If a mathematician did not know something which Amer thought he or she should know, he would say that the person "doesn't know anything"–the line between utter ignorance and incomplete knowledge was also narrow for Amer.

Although his research area was set-theoretic topology, Amer knew a great deal about other branches of mathematics. He was fluent in number theory, combinatorics, analysis, logic, and geometry. For example, his result in [11] was quite far removed from topology of any sort. In that paper, he dealt with the following question: If the set of real numbers is partitioned into (continuum many) countable sets, is there necessarily a Hamel basis which intersects each of these sets at most once? Amer showed that such a Hamel basis exists for every such partition if and only if the Continuum Hypothesis fails.

Amer published research dealing with various aspects of set-theoretic topology, but his greatest interests were in questions dealing with products and normality. He made major contributions to the literature of Dowker spaces. In [7], [10], and [15], using delicate techniques and set-theoretic hypotheses such as $\diamondsuit$, he produced spaces X and Y such that the product $X \times Y$ is a Dowker space, that is normal and not countably paracompact. These constructions are difficult; if they had not been difficult Amer would not have published them.

In addition to producing original research of the highest quality, Amer was gifted at explaining mathematics. He could, without preparation, answer a question someone might have about some theorem in, for example, number theory, with a complete polished lecture describing clearly not only what the

theorem said but also how to prove the theorem, its background, and its consequences. He had a knack for using what people felt comfortable with to help them understand something new. His survey paper [13] on normality in products is as good an example of expository mathematical writing as one is likely to find.

It was perhaps too easy to become used to having Amer around to talk to about mathematics. Amer excelled as a creator, an expositor, and a teacher of mathematics. In losing him, we have lost a wonderful mathematician, colleague, and friend.

–Ronnie Levy

Amer's Publications

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[2] (with F. Zejnulahi) *Some famous theorems in elementary n umber theory*, Matematika, **10** (1981), 43-60. (In Croatian.)

[3] *Embedding cosmic spaces in Lusin spaces*, Proc. Amer. Math. Soc., **89** (1983), 515-518.

[4] (with M.E. Rudin) *Set theoretic constructions of nonshrinking open covers*, Topology Appl., **20**(1985), 167-177.

[5] (with E.van Douwen, J. Merrill, S. Watson) *The cardinality of countably compact Hausdorff spaces*, Topology Appl., **27**(1987), 1-10.

[6] *Normality in products*, Topology Appl., **22** (1986), 71-82.

[7] *A Dowker product*, Trans. Amer. Math. Soc., **292**(1985), 519-530.

[8] (with K. Chiba) *Normality of product spaces*, Fund. Math., **128** (1987), 99-112.

[9] (with E. van Douwen) *Spaces of nonuniform ultrafilters in spaces of uniform ultrafilters*, Topology Appl., **35** (1990), 253-260.

[10] *Another Dowker product*, Topology Appl., **36** (1990), 253-264.

[11] *Partitions of vector spaces*, Proc. Amer. Math. Soc., **110** (1990), 491-493.

[12] *The normality of products with one compact factor*, revisited, Topology Appl., **52** (1993), 121-126.

[13] *Normality in products*, The work of Mary Ellen Rudin, Frank Tall editor, Annals of the New York Academy of Sciences, v705 (1993), 17-46.

[14] *A hereditarily normal square*, Topology Appl., **56** (1994) 13-23.

[15] *Yet another Dowker product*, Topology Appl., **56**(1994), 35-43.

[16] (with R. Levy) *Irresolvable products*, Papers on General Topology and Applications, Susan Andima *et al* editors, Annals of the New York Academy of Sciences, v806 (1996), 42-48.