

IAN KOGAN *

M. SHIFMAN

*William I. Fine Theoretical Physics Institute
University of Minnesota
116 Church Street S.E.
Minneapolis, MN 55455, USA*

When some people leave us, the world becomes emptier and colder...

Ian Kogan was born into a Jewish family on September 14, 1958 in Glazov, a small town in the Northern Urals, far away from all the cultural centers of what was then the Soviet Union. All life in this town revolved around a uranium plant where Ian's parents worked for 41 years.

Seemingly out of the blue, at the age of 14, Ian became interested in physics, and almost immediately his teachers realized that he had a strong and original mind. Ian enrolled in Correspondence Courses of the Moscow Institute for Physics and Technology (MIPT). Although Ian was always shy, in this endeavor he showed strong willpower and determination.

At the age of 16, Ian began his life journey: accompanied by his father he went to Moscow to pass the entrance examinations at MIPT. He obtained the highest grades on all written examinations, and then ... Although Ian was extremely bright, way beyond the average level, he nearly failed the oral mathematics exam in which he was asked killer problems. This was a trick routinely used by ferocious anti-Semites who held influential positions in Soviet mathematical schools. Ian's ascent to the summit was not easy, but he never complained, never.

I close my eyes and I see him as I first saw him in ITEP, around 1980, in the hall of a large mansion occupied by theorists. An awkwardly dressed provincial boy with dark black hair and large brown eyes, deep and warm. To say that his eyelashes were long and thick was an understatement. When he was blinking one could think that it was a butterfly folding and unfolding its wings.

I close my eyes and I see Ian the way I saw him the last time in Paris. An

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Oxford professor, wearing an elegant coat and neckerchief. Part of his hair gone, with silver in the beard, but still the same eyes glowing with warmth and kindness. I hear Ian's voice...

Twenty years elapsed between these two recollections, the span of Ian's professional career. Ian graduated from the Moscow Institute of Physics and Technology, in parallel completing his education in ITEP, in 1981. That he came to ITEP was a great luck for him, for ITEP, and for me personally. The ITEP Theory Department, with its creative atmosphere and respect for deep thought, was just the right place for Ian. I was only one of his teachers, but I always thought of him as a younger brother.

Ian started his professional career with hadronic physics, a topic to which he repeatedly returned throughout his life. His scientific horizons rapidly expanded; already in three years Ian was an early explorer of Chern-Simons electrodynamics. His interests were remarkably broad — from quantum chromodynamics to solid state physics, from financial market fluctuations and risk assessment to strings, from quantum gravity to conformal field theory — a unique quality in the age of narrow specialization. And everywhere he left his profound imprint. Ian was one of the co-discoverers of phase transitions in strings, and, lately, of the logarithmic conformal field theory and the theory of multi-gravity. He championed the application of logarithmic conformal field theory and string theory in solid state physics. It would be fair to say that he circumnavigated theoretical physics. He had the spirit of a pioneer and a scout — always at the front line of research, and, quite often, ahead of the front line. He had the stamina to go in those directions where other people had no courage to pursue. Ian's death is a tragedy for the entire physics community.

Ian's attitude to physics was romantic. His admiration of the beauty of the laws of nature never faded away, and was as strong in 2003 as it was in 1972, the very beginning of Ian's physics journey. Ian's enthusiasm was contagious. Nikita Nekrasov recollects:

“It was Ian's enthusiasm, with which he was throwing formulae and graphs on a blackboard in Volodya Fock's apartment around 1989, that got me contaminated with his urge to understand things, and express this understanding in terms of beautiful formulae. I cannot say that I always agreed with Ian on physics issues, but discussing them was always interesting and fascinating, and, I think, it was very important for me to be able to have these discussions with Ian. I liked his aggressive style of talking physics, and I learned a lot from him. In my family there is now an empty spot. We all thought of Ian as of a kind spirit, who could bring sun on a gloomy day,

tell a joke, drag us to go dancing tango, or even go jogging without any idea of what it was like.”

Ian was always simmering with ideas. Always. He had more ideas than he could possibly sort through. And he shared them generously with his students at Oxford University and Balliol College, of which he became a permanent member in 1994. This is what one of his recent students, Guilherme Milhano, wrote in a farewell message:

“I am certainly just one amongst many. Many those for whom Ian was a deciding factor in life. His unlimited support, unbound kindness and generosity toward someone who could give back but very little, find no other explanation than the rare selflessness. That made Ian great and unique. I can only hope to do you justice. I am proud to be your student and friend. Good bye, Ian.”

During the two decades of his professional career Ian published almost 200 scientific papers. These involved sixty collaborators! Indeed, his soul and his mind were open to everybody. He had so many friends in Russia, England, the United States, and, in fact, everywhere in the world. Ian was truly cosmopolitan, in the best sense of the word.

It was so easy to get him excited... just mention some scientific problem. If the topic was deep enough, Ian would instantly delve into it, and before long, start generating innovative suggestions and ideas. He was devouring books on economics, mathematics, biology, history, and God knows what else. Once he mentioned to me that he had just returned from a theological debate with an orthodox rabbi!

Ian was a day-dreamer, both in physics and in life. He combined a childishly joyful attitude with the wisdom and the seriousness of a great man. That’s why children loved him. My daughters adored him when they were little, and they still love him now, 20 years later. He could talk to them as an equal, and yet seriously and responsibly — so that they felt respect and support.

On rare occasions when he decided that he had to rest, Ian loved to watch James Bond movies. He knew them by heart. It was amazing to see him getting agitated like a boy from the adventures of 007.

Ian was the kindest man I ever knew. Helping those in need was as natural to him as breathing. When I was on my way to the airport to fly to Oxford to say farewell to Ian, I got a message from Eletsksys. They wanted me to mention that when their little son Misha, born 2.5 months prematurely, was on the brink of death, Ian gave his blood to help bring their little child back

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to this world. They will never forget... No, it is no surprise that Ian had so many friends.

I think Ian's children — a daughter from the first marriage, and two sons from the second — can be proud of their father. I hope that they will be proud of him today, in ten years, and in twenty... always... I am proud to have been his friend.

Being courageous and aggressive in science, in every-day life Ian was gentle — perhaps, too gentle — vulnerable and defenseless. Sometimes I felt that deep inside he was disturbed and not at peace with himself. The last years in Oxford seemed to bring a relief from this tension, granting Ian the peace of mind he deserved.

Ian drove through his life in the fast lane. Always. He wanted to understand more, he wanted to do more. He was at the peak of his creative powers, full of plans for the future, a live pulsating lump of energy. On the blackboard of Ian's office I saw a long list of "to do" things, which stretched well through the end of the summer.

His heart could not cope. It suddenly stopped in the morning of June 4, 2003, the day after a long afternoon seminar that Ian gave on his favorite topic of multi-gravity at ICTP in Trieste.

Life can be so unfair ...

When such people leave us, the world becomes emptier and colder...