## MISHA SHALOM

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These are some recollections I have of Professor Michael (Misha) Marinov after his arrival in Israel, from talking to him and his family, from excursions with him, and from seeing him in action.

Misha came to the Physics Department of the Technion in 1988 and soon after that the Marinov family rented an apartment in the Technion housing (called Shikun Hatechnion)in Ahuza, Haifa, where I live, and thus becoming neighbors of mine. They spent about two years there and then moved to an apartment of their own in the same neighborhood. I also had the privilege to be on Misha's appointment committee for the position of a full professor at the Technion and had a chance to talk to people about the Marinovs and about Misha's academic achievements. This gave me the opportunity and pleasure to get to know the family, and Misha, in particular, already in the early stages after their arrival in Israel.

The Marinovs made aliya<sup>*a*</sup> to Israel in 1987 and Misha appeared in our department after spending a year in the Racah Institute of Physics of the Hebrew University in Jerusalem. While working there the Marinovs lived in Gilo, Jerusalem. Misha also taught in the Judea and Samaria College in Ariel, helping to establish there a new college where at that time there were about 1,000 students. Since then this college has grown in size and has an enrollment of about 6,500 students. Recently, Gilo, where Misha's sister and her family still live, is often in the news, being a target of Palestinian terror shelling.

After coming to our department Misha soon established himself as an expert and source of information on Soviet Union immigrants, both for staff and students. There is a saying in Yiddish that "one goes to him like to a good Jew," and people came to Misha in large numbers, and he helped many of them to start their lives in Israel. He told me that he advised newcomers with academic degrees to go to libraries and get acquainted with the activities of people and institutions in Israel as a way to choose the right place for future work. In my view this was very valuable advice. Misha was also instrumental in advising new students on all levels how to continue their studies in Israel. He was active in selecting the good students for admission to the Technion, and at the same time to cut the not so good ones in a very firm way. On

<sup>&</sup>lt;sup>a</sup> [This literally means "to go up" but is used to describe immigration to Israel.]

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a Technion mission to the States and Canada Misha was acquainting people with the problems and needs of the big immigration wave to Israel from the Soviet Union. Very few people could do this job better than Misha.

Our Physics Department has tea time twice a day and Misha attended it regularly. This was an opportunity to listen to him talk on many different subjects and to appreciate the breadth of Misha's universal knowledge. He liked to enter into discussions on subjects that supposedly should have been in the field of expertise of his opponents, like talking to people about the history of their native town or country, discussing their literature and arts, origins of languages and many other matters. It was at these times when one was often overwhelmed by the depth and detail of Misha's encyclopedic knowledge. When talking to a religious Jew Misha's knowledge would be superior on Biblical stories, and when talking to a religious Christian he would often know the New Testament better than his opponent. Misha could get into a discussion on Royal families with a knowledge above any expectations of the details about their marriages and divorces, children (both legitimate and illegitimate), family ties and many other issues. Of course, one of the popular subjects at our tea times in the department is Israeli politics, with Misha representing there the right wing of the political spectrum. Among our professors he was in a very small minority, but he, nevertheless, managed to put across his strong views and convictions. His opponents might not have agreed with him but the power of his knowledge of facts and his phenomenal memory made them listen to him.

Another thing that comes to my mind about tea time is that Misha would often drink his black coffee with lemon which was very unusual to many of us. Misha called this the Moscow style coffee but he would say that he had no interest in going back to Russia where he, his family and Jews, in general, were badly mistreated. This is very different than what Solzhenitsyn says in his recent book "200 years together" where he tries to paint a rather rosy picture of the Jewish-Russian coexistence. Misha had good reasons to be bitter about the Soviet Union after having spent 8 years (1979-1987) as an unemployed refusnik. During that time he made a living as a construction laborer and translator of literature in mathematics and physics. While being a refusnik Misha did not lose contact with physics and physicists, including people from outside the Soviet Union. He soon became well known as a refusnik in the scientific world, and at the same time he achieved wide recognition in mathematical physics and quantum field theory.

I had the opportunity to listen to Misha's lectures and found him to be an excellent and conscientious lecturer. It did not take Misha too much time to attract graduate students; during his tenure at the Technion Misha was thesis advisor to 6 PhD students and was adored by them. Misha devoted much time to his teaching duties, in general, and to his graduate students in particular. He had the skills to teach students how to tell the important from the less important. I remember that during his lectures to graduate students in 1991 he discussed the Gauss-Bonnet equation in topology and he called it "the mother of all equations" in the spirit of the Gulf War, which Saddam Hussein called "the mother of all wars". Also, in Moscow (1980-82) while a refusnik himself, Misha gave a 4-term course on Modern Theoretical Physics for students who, because of their Jewish origin, were not accepted to Moscow State University.

Misha liked Israel, liked Haifa, and swimming in the Mediterranean, hiking in the Carmel National Park and picking mushrooms. In all these activities the whole family, his wife, Lilia, and daughters, Masha and Dina, would often be with him. Education was important in the family. Lilia is in computer science and works at Haifa University. Masha is a PhD student at the Technion working on urban and regional planning, her hobbies are rock climbing and paragliding. Dina is also at the Technion as undergraduate in the Department of Industrial Management. She has reached the highest level in Israel in rodeo wheels, in which she is presently an instructor. Dina also leads Israeli youth groups for competitions abroad.

It took doctors in Israel a long time to diagnose Misha's disease and when it was established that he had lung cancer, he told us the story about his visit to Kazakhstan in the late 50's. He was sent there with a group of students from the Moscow State University to work in agriculture. Not far from where they were stationed the Soviet Government was conducting nuclear tests, and Misha told us that they had seen the bright flashes of the explosions. Many of the students of this group died of cancer. Misha fought the disease till the last day, and never lost hope. Already on his deathbed, there was a group of professors from our department who visited him in the hospital, and this was during the period of peace talks with Syria. Somebody pointed out to Misha that Israel would receive 10 billion dollars from the States as compensation for leaving the Golan Heights. Misha's response was immediate. He said that if we leave all of Israel to the Arabs we might get 100 billion dollars. Misha was a proud Jew with a strong affinity for the Zionist cause and the State of Israel.