

Igor Ekhiel'evich Dzyaloshinskii (on his 80th birthday)

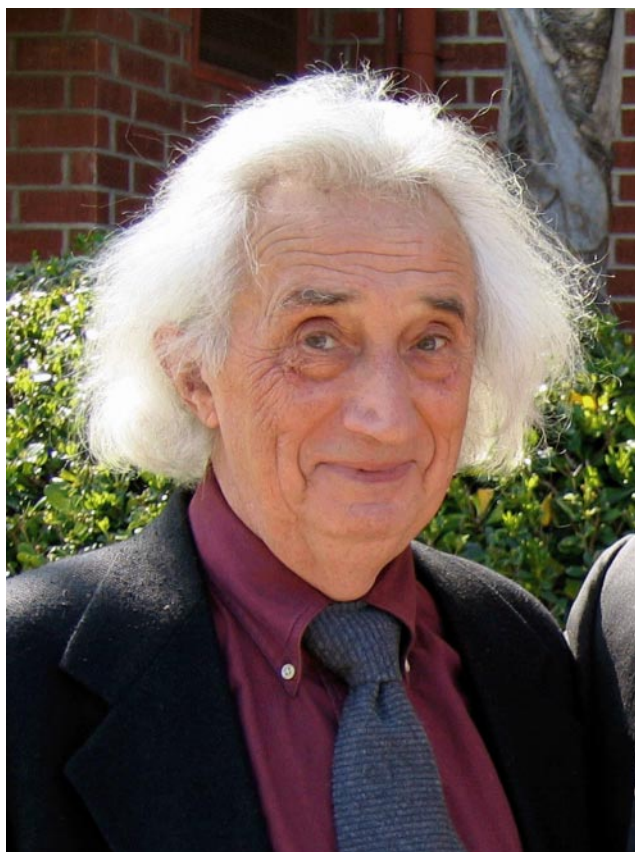
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Igor Ekhiel'evich Dzyaloshinskii was born on 1 February 1931 in Moscow. His fate was to become one of the students of L D Landau, and to be very close to the Teacher in style, brilliance, and temperament. Igor Ekhiel'evich is one of the founding fathers of the L D Landau Institute of Theoretical Physics, where he worked from the day the Institute was created to the day of his departure to the USA in 1991. IE was one of the leaders of the Institute and his results and his influence on teaching the young theoreticians, on seminar work, and especially on the general scientific and human atmosphere allowed the Institute to mature and become one of the few intellectual oases in the country.

IE Dzyaloshinskii was elected Corresponding Member of the USSR Academy of Sciences, was a professor at Moscow State University, and worked as editor of the journals *Zh. Eksp. Teor. Fiz. (JETP)* and *Pis'ma v Zh. Eksp. Teor. Fiz. (JETP Lett.)*. Dzyaloshinskii's main scientific achievements were already outlined in the Personalia section published by *Physics–Uspekhi* in 2001 in the tribute to his 70th birthday. We will only list the fields of theoretical physics to which he contributed substantially, often in a defining manner. These are: magnetism in all its manifestations (and especially antiferromagnetism, in which Dzyaloshinskii grew very early into a recognized leader), molecular forces and fluctuation interactions, methods of many-body quantum theory, Fermi liquids, phase transitions, liquid crystals, quantum crystals, topological structures, spin glasses, strong magnetic fields, low-dimensional systems, charge-density waves, superconductivity, and high-temperature superconductors.

We shall point out the results of the current phase in the biography of IE Dzyaloshinskii in connection with his work in the USA, at the University of California Irvine, where his talent as a teacher majestically took wing. Dzyaloshinskii's recent publications (2007–2009) belong to the very active field of multiferroics, i.e., materials in which magnetic and ferroelectric order parameters coexist. Multiferroics are interesting in their fundamental aspects as complex physical systems with nontrivial properties, especially for promising applications to information recording and reading devices. Regardless of the thousands of publications in this fashionable field, IE Dzyaloshinskii has displayed his characteristic originality and elegance of style and has been able to predict some new physical effects not noticed by other authors. Among them are, for example, the marvellous paramagnetism of phonon gas or the motion of the magnetic domain wall in an external electric field, which has already been experimentally confirmed.

Indeed, one has to be a DZYALOSHINSKII to be able to work at this level while reaching his 80th birthday.



Igor Ekhiel'evich Dzyaloshinskii

Friends, colleagues, disciples, and everyone who has had the good fortune of being personally acquainted with Igor Ekhiel'evich Dzyaloshinskii wish him all the best on this day, as well as many happy returns, good health, much happiness, and new achievements in his work.

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