CURRICULUM VITAE Victor A.Vassiliev

Personal information. Born: April 10, 1956, Moscow, USSR. Citizen and resident of Russia. Married, with three children. Address: Steklov Mathematical institute, 8 Gubkina str., 119991, Moscow, Russia. Tel. [7-095]-9383980 (of), [7-095]-4261659 or -5156266 (h). Fax [7-095]-1350555. E-mail <u>vva@mi.ras.ru</u>. Personal page www.mi.ras.ru/~vva

Education: Dr. of Sci., 1992, Mathematics, Steklov Math. Inst. of Russian Ac. Sci., Moscow.Ph.D., 1982, Mathematics, Moscow State University.M.S., 1978, Mathematics, Moscow State University.

Employment: Steklov Math. Institute, Principal Researcher since 1997, Leading researcher in 1995-1997. Independent Moscow University, Professor since 1991. **R**esearch Inst. for System Studies, Moscow, Leading Researcher, 1990-1995. Inst. of Applied Math., Moscow, Senior Researcher, 1989-1990. **S**tatistical Information Systems Research Institute, Senior Researcher, 1987-1989. **D**ocuments and Archives Research Institute, Senior Researcher, 1981-1987.

Grants, awards and visiting positions include: Moscow Math. Society Award (1986); Miller Research Professorship of Berkeley University, 1999; MSRI Research Professorship, 1997; Visiting Fellowship at Trinity College, Cambridge Univ., UK, 2000; three INTAS and three NWO grants (head of research teams in all six cases).

Member: Moscow Math. Society (since 1984), American Math. Society (since 1995), **R**ussian Academy of Sciences (ordinary mem. since 2003, corr. mem. 1997-2003).

Publications: over 100 papers in Singularity Theory, Topology (including Knot Theory), Combinatorics, Complexity Theory, Integral Geometry, Symplectic Geometry, Algebraic Geometry, and Partial Differential Equations, including the books: (1) Complements of Discriminants of Smooth Maps: Topology and Applications, AMS, 1992 and 1994; (2) Applied Picard-Lefschetz Theory, AMS, 2002; (3) Lagrange and Legendre Characteristic Classes, Gordon and Breach Publ., 1988 and 1993; (4) Ramified Integrals, Singularities and Lacunas, Kluwer, 1994; (5) Introduction to Topology, AMS, 2001 (transl. from Russian).

Main mathematical results include: a general method of computation and realization of homology groups of spaces of non-singular geometric objects, including spaces of knots, spaces of smooth complex hypersurfaces and spaces of differentiable functions without complicated singularities; proof of the Smale-Hirsch h-principle in many new situations, construction of integer Lagrange characteristic classes via universal complexes of singularities and multi-singularities; the strongest known estimates (both upper and lower) of the minimal number of branchings of root-finding algorithms; stratified version of the Picard-Lefschetz theory (for both standard and intersection homology groups), proof of the Atiyah-Bott-Garding conjecture on the necessity of the local Petrovskii condition for hyperbolic differential equations; multidimensional version of the Newton's theorem on non-integrable curves.

Invited addresses: Plenary talks at 34 international conferences, including International Congress of Mathematicians in Zuerich (1994).

Professional activities and services:

- Member at Large, EC IMU, 2004-2006.

- Chairman of the Commission of Russian Ac. Sci. on teaching Mathematics in schools, since 2004 (the duties of the commission include checking textbooks in Math. for secondary schools, and expertise of educational standards and programs).

- Vice-president, Moscow Mathemtical Society, since 2004.

– Member of the Program Committee of the International Congress on Mathematical Education in Monterrey (2008).

- Member of organizing or/and program committees of eleven international conferences and workshops in Mathematics, including four meetings on Singularity Theory in Oberwolfach; codirector of the NATO Advanced Research Workshop on TQFT in Calgary, 2001.

- Editorial boards member, journals "Functional Analysis and its Applications", "Selecta Math. New Series", Journal of Knot Theory and its Ramifications", "Moscow Mathematical Journal", "Topology and its Applications", "Izvestiya: Mathematics".

In the current EC IMU, I have the duty of a liaison person with EC ICMI, and am planning to continue my work in common activities with it. In general, I am highly interested in, and plan to do what I can for the preservation of a satisfactory level of mathematical enlightening and literacy (both in my country and throughout the world), as a necessary part of the mental robustness and quality of the human society.