Gábor Tóth

Education and Training:

- M.S. in Physics and Translation of Technical English, Eötvös University, Budapest, 1989
- Ph.D. in Astrophysical Sciences, Princeton University, 1993
- Postdoctoral training in computational astrophysics, University of Utrecht, 1994-1997
- Postdoctoral training in computational astrophysics, Eötvös University, 1997-1999

Research and Professional Experience:

- Research Scientist, University of Michigan, 2007-present
- Associate Professor, Eötvös Loránd University, 2001-2007
- Associate Research Scientist, University of Michigan, 2001-2007
- Visiting Research Scientist, University of Michigan, 2000-2001
- Research Consultant, RIACS - NASA Ames, Mountainview, August 1998
- Visiting Researcher, Observatoire de la Côte d'Azur, Nice, France, January 1994
- Assistant Research Scientist, Eötvös Loránd University, 1993
- Research Assistant, Space Telescope Science Institute, Baltimore, 1988

Honors and awards:

- Research Faculty Achievement Award, University of Michigan, 2008
- Bolyai Fellowship of the the Hungarian Academy of Sciences, 1997-1999
- Postdoctoral Fellowship of the Hungarian Science Foundation, 1997-1999
- Undergraduate Fellowship of the Hungarian Republic, 1987

Publications:

- Author or co-author of 74 peer-reviewed publications.
- Over 230 scientific presentations including 66 invited talks.

Synergistic activities:

- Reviewer for the Journal of Computational Physics, Computer Physics Communications, the Astrophysical Journal, Astronomy and Astrophysics, the Journal for Geophysical Research, Space Weather Journal, SIAM Scientific Computing. Reviewed NASA, NSF and DoE proposals. Served on NASA review panels.
- Leading role in the design, implementation, application and development of the Space Weather Modeling Framework (SWMF). Software archictect for the Center for Radiative Shock Hydrodynamics (CRASH). Major contribution to the numerical schemes used in the global MHD code BATS-R-US, the Global Ionosphere-Thermosphere Model (GITM) and the Polar Wind Outflow Model (PWOM). Developed the Versatile Advection Code (VAC), a general hydrodynamics and magnetohydrodynamics software package used by more than 100 astrophysicists world wide.