

## Curriculum Vita

### Vasyl Yurchyshyn

#### Education:

- ◆ *Ph. D.*, in Physics (Solar Physics) at the *Main Astronomical Observatory, Kiev, Ukraine, 1998. Ph.D. Thesis: Topology and Evolution of Active Region Magnetic Fields.*
- ◆ *M.A.*, Optics and Spectroscopy at Physics Department of Ivan Franko National University, Lviv, Ukraine, 1990. *M.A. Thesis: Application of uniaxial negative Ruby crystals ( $Al_2O_3$ ) as remote temperature sensors.*

#### Affiliations and Professional Experience:

- ◆ *Research Professor*, Big Bear Solar Observatory of New Jersey Institute of Technology (BBSO/NJIT), 2007 - present. Research Interests: coronal mass ejections and interplanetary magnetic field; magnetic clouds and geomagnetic storms
- ◆ *Assistant Research Professor*, BBSO/NJIT, 2002 - 2007
- ◆ *Post-Doctoral Researcher*, BBSO/NJIT, 1999 - 2001. Research Interests: coronal mass ejections; solar flares; earthshine observation and measurement of Earth's albedo
- ◆ *Visiting Scientist*, Huairou Solar Observatory, China, 1995
- ◆ *Researcher*, Crimean Astrophysical Observatory, Ukraine, 1990-2003

#### Membership in Societies:

American Astronomical Society, 2004; American Geophysical Union, 2001; Solar Physics Division, American Astronomical Society, 1999; Ukrainian Astronomical Association, 1995

#### Awards and Participation in the Research Projects:

- ◆ **PI**, NASA LWS Grants (2005; 2008); NASA HGI Grant (2008); NSF Space Weather Grant (2002); **Co-PI**, numerous NASA and NSF Grants
- ◆ *AGU Editor's Citation* award for Excellence in Refereeing
- ◆ *Yuri Drogobych* Award in Solar Physics, Ukrainian Astronomical Association, 1998

#### Professional Contacts:

V. Abramenko, P. Goode, H. A. Andic, NJIT; J. Qiu, Montana SU; Q. Hu, UC Riverside; M. Karlicky, Astronomical Inst., Czech Rep.; W. Otruba, Graz Univ., Austria; D.P. Choudhary, CalState, Northridge; S. Koonin, Caltech, British Petroleum; J. Krall, J. Chen, NRL; F. Zuccarello, INAF, Italy, R. Lepping, NASA/GSFC; K. Ichimoto, H. Watanabe, Kyoto Univ., X.P. Zhao, Stanford Univ.

#### Conference and Meetings Organization

- ◆ Convener, Special Session SH10: *Magnetic Fields in Coronal Mass Ejection Source Regions*, THE 2005 JOINT AGU ASSEMBLY, New Orleans, Louisiana, May 23-27, 2005
- ◆ Member of the Scientific Organizing Committee, Joint Discussion 3: *Magnetic Fields and Helicity in the Sun and Heliosphere*, XXVth IAU General Assembly, Sydney, Australia, 2003

#### Synergistic Activities:

- ◆ Participated in grants that have resulted in two international networks: Global Halpha Network and the Earthshine Observation Network
- ◆ Adviser for graduate students (*T. J. Spirock, Hui Song, Ju Jing, Chang Liu*)

- ◆ Referee for *Journal of Geophysical Research*, *Geophysical Research Letters*, *Astrophysical Journal*, *Solar Physics*, *Space Weather*, *Astronomy and Astrophysics*, *Advances in Space Research*
- ◆ Panel and mail-in reviewer for NASA and NSF
- ◆ Engaged in a range of public and educational activities (public tours, lectures at schools)

## Publications

- V. Yurchyshyn, D. Tripathi, 2009, *Relationship between earth-directed solar eruptions and magnetic clouds at 1AU: a brief review*, Proceedings of 2008 AOGS, Adv. Geoscience, accepted
- V. Yurchyshyn, 2008, *Relationship between EIT post eruption arcades, coronal mass ejections, coronal neutral lines and magnetic clouds*, *Astroph. J. Lett.*, 675, L49
- V. Yurchyshyn, Q. Hu, R.P. Lepping, B.J. Lynch, & J. Krall, 2007, *Orientations of LASCO Halo CMEs and Their Connection to the Flux Rope Structure of Interplanetary CMEs*, *Adv. Space Res.*, accepted, DOI: 10.1016/j.asr.007.01.059
- Qiu, J., Hu, Q., Howard, T.A., & Yurchyshyn, V., 2007, *On the Magnetic Flux Budget in Low-Corona Magnetic Reconnection and Interplanetary Coronal Mass Ejections*, *Astrophys. J.*, 659, 758-772
- V. Yurchyshyn, C. Liu, V. Abramenko, & J. Krall, 2006, *The May 13 2005 Eruption: Observations, Data Analysis and Interpretation*, *Solar Phys.*, 239, 317-335
- V. Yurchyshyn, M. Karlicky, Q. Hu, & H. Wang, 2005, *Evidence for tether-cutting reconnection in a quadruple magnetic configuration in the Apr 9 2001 M7.9 flare*, *Solar Physics*, 235, 541
- Krall, J., Yurchyshyn, V., Slinker, S., Skoug, R.M., & Chen, J. 2006, *Flux Rope Model of the 2003 October 28-30 Coronal Mass Ejection and ICME*, *Astrophys. J.*, 642, 541
- Qiu, J., & Yurchyshyn, V. 2005, *Magnetic Reconnection Flux and Coronal Mass Ejection Velocity*, *Astrophys. J.*, 634, L121
- V. Yurchyshyn, Q. Hu & V. Abramenko, 2005, *Structure of magnetic fields in NOAA active regions 0486 and 0501 and in the associated interplanetary ejecta*, *Space Weather*, 3, No. 8, S08C02
- V. Yurchyshyn, S. Yashiro, V. Abramenko, H. Wang & N. Gopalswamy, 2004, *Statistical distributions of speeds of coronal mass ejections*, *Astrophys. J.*, 619, 599-603
- Yurchyshyn, V. B., Wang, H., & Abramenko, V., 2004, *Correlation between Speeds of CMEs and the Intensity of Geomagnetic Storms*, *Space Weather*, 2, doi:10.1029/2003SW000020