

Curriculum Vitae

- Name and address:** **József Kóta**
Senior Research Scientist, Lunar & Planetary Laboratory
542 Space Sciences, University of Arizona
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e-mail: kota@lpl.arizona.edu
- Personal:** Born August 29, 1944, in Tata, Hungary
US citizen since 2001
- Education:** 1962 - B.S. (honors) Roland Eötvös University
Budapest, Hungary
1980 October 21 - Ph.D at Roland Eötvös University
Budapest, Hungary.
- Positions:** Senior Research Scientist - University of Arizona
2003 - present
Staff Scientist - University of Arizona, 1992 - 2003
Visiting Scientist - University of Arizona
(1985 - 1987, 1989 - 1992)
Senior Research Scientist - KFKI
(Central Research Institute of Physics)
Budapest, Hungary, 1984 - 1989
Research Scientist - KFKI, Budapest, 1967 - 1984
- Fellowship:** Visiting Scientist - University of Nagoya (3 mos), 2012
Visiting Scientist - University of Tokyo (3 mos), 2007
JSPS Short-term Fellowship - Shinshu University 2005
Visiting Scientist - University of Arizona, 1988
Visiting Scientist - Durham University, UK, 1972-1973
- Experience in
Higher Education:** Thesis advisor for:
Dr. Károly Kecskeméty, received his Ph.D. in 1977
Dr. Ákos Körösmezey, received his Ph.D. in 1984
both in Budapest, Hungary

- Research Interest:** Galactic and anomalous cosmic-rays in the Heliosphere, solar modulation and anisotropies of cosmic rays
Theoretical and numerical modeling of the transport and acceleration of charged energetic particles
Solar wind, modeling the evolution of shock waves, interaction of solar wind and interstellar matter
Cosmic rays in the Galaxy. Anisotropies of cosmic rays in the 100 GeV - 10 TeV region
- Professional Memberships:** American Geophysical Union
Roland Eötvös Physical Society, Hungary
COSPAR Associate
- Professional Services:** Member of Cosmic Ray Commission of IUPAP
1984-1990
Member of Astronomy & Astrophysics Board of European Physical Society, 1984-1990
Associate Editor, JGR Space Physics, 1993-1997
- Awards:** KFKI 'Jánossy Award', Hungary 1976 and 1980
'Selényi Pál Award' of Roland Eötvös Physical Society, Hungary, 1977
JGR 'Excellence in Refereeing', 1997
- Publications:** ~ 98 in refereed journals
~ 72 in conference proceedings
- Invited Talks in last 3 years:** University of Nagoya, Nagoya, Japan, 2012
11th Int. Astrophys. Symp., Palm Springs, 2012
10th Int. Astrophys. Symp., Maui, 2011
Int. Symp. ASTRONUM, San Diego, Ca, 2010
ISSI Workshop, Bern, Switzerland, 2010
9th Int. Astrophys. Symp., Maui, 2010
SHINE 2009 Meeting, Wolfville, Canada, 2009
7th Int. Astrophys. Symp., Kuauai, 2009
7th Int. Astrophys. Symp., Kuauai, 2008
University of Tokyo, Kashiwa, Japan, 2008
- Past Grants:** NASA Heliopspheric Physics: 'Shock vs Turbulence: 'Particle Acceleration...', 2008-2012 (P.I.)
NASA LWS: 'Physical Models of Cosmic Rays...' 2008-2012 (P.I)
NSF 'Comprehensive Corona and Heliospheric Model

2006 - 2011 *Arizona P.I.*
NASA 'Energetic particles and the Earth Environment
in Space' 2005 - 2008
NSF 'High Performance Adaptive Framework
for Global Space Weather', 2001-2006
ions via Energetic Neutral Atoms (ENA)', 2001-2004
NASA 'Transport equations of cosmic rays', 1995-2001
NASA 'Cosmic-ray diffusion', 1991-1995
NSF 'Study of acceleration and transport of energetic

Current Grant(s): NASA IBEX Guest Investigators, 2009-2014 (P.I.)

Selected Publications over the Past 5 years:

- 'Theory and Modeling of Galactic Cosmic Rays: Trends and Prospects', *J. Kóta, Space Sci. Rev.*, **176**, 85, (2013)
- 'Cosmic Ray Diffusion in a Sectorized Magnetic Field in the Distant Heliosheath', Florin-ski, V., F. Alouani-Bibi, *J. Kóta*, and X. Guo, *Astrophys. J.*, **754**, 31 (2012)
- 'Modulation of the Galactic Low-energy Proton Spectrum in the Inner Heliophere', Kecskeméty, K., Yu.I. Logachev, M.A. Zeldovich, and *J. Kóta*, *Astrophys. J.*, **738**, 173 (2011)
- 'Cosmic Rays Modulation in the Heliosheath', *J. Kóta, ASPC*, **444**, 48 (2011)
- 'Particle Acceleration at Near-perpendicular Shocks: the Role of Field Line Topology', *J. Kóta, Astrophys. J.*, **723**, 393 (2010)
- 'Particle acceleration by collisionless shocks containing large-scale magnetic field variations', Guo, Fan, J.R. Jokipii, and *J. Kóta, Astrophys. J.*, **725**, 128 (2010)
- 'Thickness of the Heliosheath, Return of Pickup Ions, LIAS/HSTOF and Voyager-1's crossing the Heliopause', Hsieh, K.C., J. Giacalone, A. Czechowski, M. Hilchenbach, S. Grzedzielski, and *J. Kóta, Astrophys. J.*, **718L**, 185 (2010)
- 'Solar Cycle Dependence of the Diurnal Anisotropy of 0.6 TeV Cosmic-ray Intensity Observed with the Matsushiro Underground Muon Detector', Munakata, K., Y. Mizoguchi, C. Kato, S. Yasue, S. Mori, M. Takita, and *J. Kóta, Astrophys. J.*, **712**, 1100 (2010)
- 'A Re-Interpretation of STEREO/STE Observations and its Consequences', Hsieh, K.C., P.C. Frisch, J. Giacalone, J.R. Jokipii, *J. Kóta*, D.E. Larson, R.P. Lin, J.G. Luhmann, Linghua Wang, *Astrophys. J.*, **694L**, 79 (2009)