

Chronological bibliography of Viktor T. Toth

November 16, 2023

Books or book chapters

- [1] Viktor Tóth. *A bűvös kocka (Rubik's Cube – in Hungarian)*. TIT, Budapest, 1981.
- [2] Viktor Tóth. *A Commodore 16-os belső felépítése (Commodore-16 internals – in Hungarian)*. Novotrade, Budapest, 1986.
- [3] Viktor T. Toth. Memory Management and the Windows 95 32-Bit Environment. In *Programming Windows 95 Unleashed*, chapter 2. SAMS Publishing, Indianapolis, IN, 1995.
- [4] Viktor T. Toth. Multitasking, Processes, and Threads. In *Programming Windows 95 Unleashed*, chapter 3. SAMS Publishing, Indianapolis, IN, 1995.
- [5] Viktor T. Toth. Win32 API for Windows NT Programmers. In *Programming Windows 95 Unleashed*, chapter 8. SAMS Publishing, Indianapolis, IN, 1995.
- [6] Viktor T. Toth. *Visual C++ 4 Unleashed*. SAMS Publishing, Indianapolis, IN, 1996.
- [7] Viktor T. Toth. Windows NT in a Software Development Environment. In *Windows NT Workstation 4 Unleashed*, chapter 14. SAMS Publishing, Indianapolis, IN, 1996.
- [8] Viktor T. Toth. *Visual C++ 5 Unleashed*. SAMS Publishing, Indianapolis, IN, 1997.
- [9] Viktor T. Toth. *Visual C++ 5 Encyclopedia pozavatyelya*. DiaSoft, Kyiv, 1997.
- [10] Viktor T. Toth. *Programming Windows 98/NT Unleashed*. SAMS Publishing, Indianapolis, IN, 1998.
- [11] Viktor T. Toth. *Linux: A Network Solution for your Office*. SAMS Publishing, Indianapolis, IN, 1999.
- [12] Viktor T. Toth. *Programming Windows 98/NT Unleashed – in Chinese*. Publishing House of Electronics Industry, Beijing, 1999.
- [13] Viktor T. Toth. *Visual C++ Kompendium*. Markt & Technik, Nuremberg, 1999.
- [14] Viktor T. Toth. *Programación Windows 98/NT Al descubierto*. Prentice Hall, Madrid, 1999.
- [15] Viktor T. Toth. *Programowanie Windows 98/NT : księga eksperta*. Helion, Katowice, 1999.
- [16] Viktor T. Toth. *Programming Windows 98/NT Unleashed – in Korean*. Information Publishing Group, Seoul, 1999.
- [17] Viktor T. Toth. *Linux: A Network Solution for your Office – in Chinese*. Publishing House of Electronics Industry, Beijing, 2000.
- [18] Viktor T. Toth. *Linux: solution réseau*. CampusPress, Paris, 2000.
- [19] Viktor T. Toth. *Linux: A Network Solution for your Office – in Chinese*. ACER TWP Corp., Taipei, 2000.
- [20] Slava Turyshev, Michael Shao, Leon Alkalai, Janice Shen, Mark Swain, Hanying Zhou, Viktor Toth, Louis Friedman, Dmitri Mawet, Henry Helvajian, Tom Heinsheimer, Siegfried Janson, Zigmond Leszczynski, John McVey, Darren Garber, Artur Davoyan, Seth Redfield, and Jared Males. Enabling High-Resolution Imaging and Spectroscopy of an Exoplanet by Use of the Solar Gravity Lens. In *The Nanosatellite Revolution: 30 Years and Continuing*, chapter 26. SPIE Press, Bellingham, Washington USA, 2023.

Papers and preprints

- [21] Viktor Tóth. A bűvös kocka egy gyors rendezése (A rapid solution of Rubik's Cube – in Hungarian). *Középiskolai matematikai lapok – Mathematical Journal for Secondary Schools*, 60(5):198–200, 1980.
- [22] Viktor T. Toth. Tensor manipulation in GPL Maxima. *ArXiv*, cs/0503073, 3 2005.
- [23] Slava G. Turyshev, Viktor T. Toth, Larry R. Kellogg, Eunice L. Lau, and Kyong J. Lee. The Study of the Pioneer Anomaly: New Data and Objectives for New Investigation. *Int. J. Mod. Phys. D*, 15:1–55, 2006.
- [24] Viktor T. Toth and Slava G. Turyshev. The Pioneer Anomaly: Seeking an explanation in newly recovered data. *Can. J. Phys.*, 84:1063–1087, 2007.
- [25] J. W. Moffat and V. T. Toth. Testing modified gravity with motion of satellites around galaxies. *ArXiv*, 0708.1264 [astro-ph], 8 2007.
- [26] J. W. Moffat and V. T. Toth. Testing modified gravity with globular cluster velocity dispersions. *Astrophys. J.*, 680(2):1158, 6 2008.
- [27] Slava G. Turyshev and Viktor T. Toth. Physics Engineering in the Study of the Pioneer Anomaly. *ArXiv*, 0710.0191 [physics.space-ph], 10 2007. Invited talk at the “IV Physics Engineering International Meeting,” Mexico City, Mexico, 15-19 October 2007.
- [28] J. W. Moffat and V. T. Toth. Modified Gravity: Cosmology without dark matter or a cosmological constant. *ArXiv*, 0710.0364 [astro-ph], 10 2007.
- [29] V. T. Toth and S. G. Turyshev. Pioneer Anomaly: Evaluating Newly Recovered Data. *AIP Conf. Proc.*, 977:264–283, 2008. Invited talk at the ”III Mexican Meeting on Mathematical and Experimental Physics,” Mexico City, Mexico, 10-14 September 2007.
- [30] J. W. Moffat and V. T. Toth. Modified gravity and the origin of inertia. *Mon. Not. R. Astron. Soc.*, 395:L25–L28, 2009.
- [31] J. W. Moffat and V. T. Toth. Fundamental parameter-free solutions in Modified Gravity. *Class. Quant. Grav.*, 26:085002, 2009.
- [32] J. W. Moffat and V. T. Toth. The bending of light and lensing in modified gravity. *Mon. Not. R. Astron. Soc.*, 397:1885–1992, 2009.
- [33] J. W. Moffat and V. T. Toth. A finite electroweak model without a Higgs particle. *ArXiv*, 0812.1991 [hep-ph], 12 2008.
- [34] J. W. Moffat and V. T. Toth. The running of coupling constants and unitarity in a finite electroweak model. *ArXiv*, 0812.1994 [hep-ph], 12 2008.
- [35] J. W. Moffat and V. T. Toth. Satellite galaxy velocity dispersions in the SDSS and modified gravity models. *Galaxies*, 2(2):263–274, 2014.
- [36] Viktor T. Toth. Independent analysis of the orbits of Pioneer 10 and 11. *Int. J. Mod. Phys. D*, 18:717, 2009.
- [37] V. T. Toth and S. G. Turyshev. Thermal recoil force, telemetry, and the Pioneer anomaly. *Phys. Rev. D*, 79:043011, 2 2009.
- [38] J. W. Moffat and V. T. Toth. Comment on ”Modified scalar-tensor-vector gravity theory and the constraint on its parameters” by Deng, et al. *ArXiv*, 0903.5291 [gr-qc], 3 2009.
- [39] Slava G. Turyshev and Viktor T. Toth. The Pioneer Anomaly in the Light of New Data. *Space Science Reviews*, 148(1):149–167, 2010.
- [40] Slava G. Turyshev and Viktor T. Toth. The Puzzle of the Flyby Anomaly. *Space Science Reviews*, 148(1):169–174, 2010.

- [41] J. W. Moffat and V. T. Toth. Redesigning Electroweak Theory: Does the Higgs Particle Exist? *ArXiv*, 0908.0780 [hep-th], 8 2009. Talk given by JWM at the Tenth Workshop on Non-Perturbative QCD at l’Institut d’Astrophysique de Paris, France, 8-12 June 2009.
- [42] J. W. Moffat and V. T. Toth. Observationally Verifiable Predictions of Modified Gravity. *AIP Conf. Proc.*, 1241:1066–1073, 2009.
- [43] J. W. Moffat and V. T. Toth. Modified Jordan-Brans-Dicke theory with scalar current and the Eddington-Robertson gamma-parameter. *Int. J. Mod. Phys. D*, 21(12):1250084, 2012.
- [44] S. G. Turyshev and V. T. Toth. The Pioneer Anomaly. *Living Reviews in Relativity*, 13:4, 9 2010.
- [45] Viktor T. Toth. The virial theorem and planetary atmospheres. *Időjárás - Quarterly Journal of the Hungarian Meteorological Service (HMS)*, 114(3):229–234, 2010.
- [46] J. W. Moffat and V. T. Toth. Can Modified Gravity (MOG) explain the speeding Bullet (Cluster)? *ArXiv*, 1005.2685 [gr-qc], 5 2010.
- [47] Viktor T. Toth. Cosmological consequences of Modified Gravity (MOG). In John Auping-Birch and Alfredo Sandoval-Villalazo, editors, *Proceedings of the International Conference on Two cosmological models*, pages 385–398. Universidad Iberoamericana, 2012. Expanded version of invited talk given at the International Conference on Two Cosmological Models, Universidad Iberoamericana, Ciudad de Mexico, November 17-19, 2010.
- [48] J. W. Moffat and V. T. Toth. Testing Modified Gravity (MOG) with gas-dominated galaxies. *ArXiv*, 1103.5634 [astro-ph.GA], 3 2011.
- [49] J. W. Moffat and V. T. Toth. Cosmological Observations in a Modified Theory of Gravity (MOG). *Galaxies*, 1(1):65–82, 2013.
- [50] Slava G. Turyshev, Viktor T. Toth, Jordan Ellis, and Craig B. Markwardt. Support for temporally varying behavior of the Pioneer anomaly from the extended Pioneer 10 and 11 Doppler data sets. *Phys. Rev. Lett.*, 107:081103, 8 2011.
- [51] Slava G. Turyshev, Olivier L. Minazzoli, and Viktor T. Toth. Accelerating relativistic reference frames in Minkowski space-time. *J. Math. Phys.*, 53:032501, 2012.
- [52] J. W. Moffat and V. T. Toth. Comment on “The Real Problem with MOND” by Scott Dodelson. *ArXiv*, 1112.4386 [astro-ph.CO], 12 2011.
- [53] Slava G. Turyshev, Viktor T. Toth, Gary Kinsella, Siu-Chun Lee, Shing M. Lok, and Jordan Ellis. Support for the thermal origin of the Pioneer anomaly. *Phys. Rev. Lett.*, 108:241101, 6 2012. Featured on the cover of Vol. 108, Iss. 24 (June 15, 2012).
- [54] E. J. M. Madarassy and V. T. Toth. Numerical simulation code for self-gravitating Bose–Einstein condensates. *Computer Physics Communications*, 184:1339–1343, 4 2013.
- [55] Slava G. Turyshev, Viktor T. Toth, and Mikhail V. Sazhin. General relativistic observables of the GRAIL mission. *Phys. Rev. D*, 87:024020, 1 2013.
- [56] Viktor T. Toth. Humidification requirements in economizer-type HVAC systems. *ASHRAE Transactions*, 119(1), 2013. DA-13-022.
- [57] Slava G. Turyshev and Viktor T. Toth. New perturbative method for solving the gravitational N-body problem in general relativity. *Int. J. Mod. Phys. D*, 24(6):1550039, 2015.
- [58] Viktor T. Toth. Self-gravitating Bose-Einstein condensates and the Thomas-Fermi approximation. *Galaxies*, 4(3):9, 2016.
- [59] Slava G. Turyshev, Mikhail V. Sazhin, and Viktor T. Toth. General relativistic laser interferometric observables of the GRACE-Follow-On mission. *Phys. Rev. D*, 89:105029, 5 2014.

- [60] J. W. Moffat and V. T. Toth. Karlhede's invariant and the black hole firewall proposal. *ArXiv*, 1404.1845 [gr-qc], 4 2014.
- [61] Viktor T. Toth. Accelerating classical charges and the equivalence principle. *ArXiv*, 1404.2801 [gr-qc], 4 2014.
- [62] J. W. Moffat and V. T. Toth. Rotational Velocity Curves in the Milky Way as a Test of Modified Gravity. *Phys. Rev. D*, 91:043004, 2 2015.
- [63] E. J. M. Madarassy and V. T. Toth. Evolution and dynamical properties of Bose-Einstein condensate dark matter stars. *Phys. Rev. D*, 91(4):044041, 2 2015. Featured in the February 2015 Kaleidoscope and on the 2016 APS print calendar.
- [64] Jun Luo, Li-Sheng Chen, Hui-Zong Duan, Yun-Gui Gong, Shoucun Hu, Jianghui Ji, Qi Liu, Jianwei Mei, Vadim Milyukov, Mikhail Sazhin, Cheng-Gang Shao, Viktor T. Toth, Hai-Bo Tu, Yamin Wang, Yan Wang, Hsien-Chi Yeh, Ming-Sheng Zhan, Yonghe Zhang, Vladimir Zharov, and Ze-Bing Zhou. TianQin: a space-borne gravitational wave detector. *Class. Quant. Grav.*, 33:035010, 2015.
- [65] Slava G. Turyshev and Viktor T. Toth. General relativistic observables for the ACES experiment. *Phys. Rev. D*, 93:045027, 2 2016.
- [66] Dimitar Prodanov and Viktor T. Toth. Sparse Representations of Clifford and Tensor algebras in Maxima. *Advances in Applied Clifford Algebras*, 27(1):661–683, 2017.
- [67] Hussain Al-Harthei, Viktor T. Toth, Atef Garib, and Samy A. Mahmoud. Efficient real-time allocation of patrol cars in traffic management. In *Proceedings of the 2nd World Congress on Civil, Structural, and Environmental Engineering (CSEE'17)*, pages ICTE–105, 2017.
- [68] Slava G. Turyshev and Viktor T. Toth. Diffraction of electromagnetic waves in the gravitational field of the Sun. *Phys. Rev. D*, 96:024008, 7 2017.
- [69] M. A. Green, J. W. Moffat, and V. T. Toth. Modified Gravity (MOG), the speed of gravitational radiation and the event GW170817/GRB170817A. *Phys. Lett. B*, 780:300–302, 3 2018.
- [70] Slava G. Turyshev and Viktor T. Toth. Wave-optical treatment of the shadow cast by a large sphere. *Phys. Rev. A*, 97:033810, 3 2018.
- [71] Slava G. Turyshev, Michael Shao, Leon Alkalai, Nitin Aurora, Darren Garber, Henry Helvajian, Tom Heinsheimer, Siegfried Janson, Jared R. Males, Dmitri Mawet, Roy Nakagawa, Seth Redfield, Janice Shen, Nathan Strange, Mark R. Swain, Viktor T. Toth, Phil A. Willems, John L. West, Stacy Weinstein-Weiss, and Hanying Zhou. Direct Multipixel Imaging and Spectroscopy of an Exoplanet with a Solar Gravity Lens Mission. *ArXiv*, 1802.08421 [astro-ph.IM], 2 2018.
- [72] Slava G. Turyshev, Michael Shao, Janice Shen, Hanying Zhou, Viktor T. Toth, Louis Friedman, Leon Alkalai, Nitin Arora, Darren D. Garber, Henry Helvajian, Thomas Heinsheimer, Siegfried W. Janson, Les Johnson, Jared R. Males, Roy Nakagawa, Seth Redfield, Nathan Strange, Mark R. Swain, David Van Buren, John L. West, and Stacy Weinstein-Weiss. Recognizing the Value of the Solar Gravitational Lens for Direct Multipixel Imaging and Spectroscopy of an Exoplanet. *ArXiv*, 1803.04319 [astro-ph.IM], 3 2018.
- [73] J. W. Moffat, S. Rahvar, and V. T. Toth. Applying MOG to lensing: Einstein rings, Abell 520 and the Bullet Cluster. *Galaxies*, 6(2):43, 2018.
- [74] Slava G. Turyshev and Viktor T. Toth. Diffraction of light by plasma in the solar system. *Journal of Optics*, 21(4):045601, 2 2019.
- [75] Slava G. Turyshev and Viktor T. Toth. Wave-optical treatment of the shadow cast by a large gravitating sphere. *Phys. Rev. D*, 98:104015, 11 2018.
- [76] J. W. Moffat and V. T. Toth. NGC 1052-DF2 And Modified Gravity (MOG) Without Dark Matter. *Mon. Not. R. Astron. Soc.*, 1:L1–L3, 2019.

- [77] Slava G. Turyshev and Viktor T. Toth. Diffraction of light by the gravitational field of the Sun and the solar corona. *Phys. Rev. D*, 99:024044, 1 2019.
- [78] Slava G. Turyshev and Viktor T. Toth. Optical properties of the solar gravitational lens in the presence of the solar corona. *European Physical Journal Plus*, 134(2):63, 2 2019.
- [79] J. W. Moffat and V. T. Toth. Masses and shadows of the black holes Sagittarius A* and M87* in modified gravity. *Physical Review D*, 101:024014, 1 2020.
- [80] Slava G. Turyshev, Michael Shao, and Viktor T. Toth. Putting gravity to work: Imaging of exoplanets with the solar gravitational lens. *Int. J. Mod. Phys. D*, 28(10):1950125, 2019.
- [81] Slava Turyshev, Michael Shao, Louis Friedman, Viktor T. Toth, Leon Alkalai, Janice Shen, Hanying Zhou, Nitin Arora, Artur Davoyan, Darren D. Garber, Henry Helvajian, Thomas Heinsheimer, Siegfried W. Janson, Les Johnson, Jared R. Males, Roy Nakagawa, Seth Redfield, Nathan Strange, Mark R. Swain, and David Van Buren. Direct Multi-Pixel Imaging and Spatially-Resolved Spectroscopy of a Potentially Habitable Exoplanet with the Solar Gravitational Lens. *Bulletin of the AAS*, 51(3):23, May 2019.
- [82] Slava G. Turyshev and Viktor T. Toth. Imaging extended sources with the solar gravitational lens. *Phys. Rev. D*, 100:084018, 10 2019.
- [83] Slava G. Turyshev and Viktor T. Toth. Photometric imaging with the solar gravitational lens. *Phys. Rev. D*, 101:044025, 2 2020.
- [84] Slava G. Turyshev and Viktor T. Toth. Image formation process with the solar gravitational lens. *Phys. Rev. D*, 101:044048, 2020.
- [85] Slava G. Turyshev and Viktor T. Toth. Image formation for extended sources with the solar gravitational lens. *Phys. Rev. D*, 102:024038, 2020.
- [86] Slava G. Turyshev, Michael Shao, Viktor T. Toth, Leon Alkalai, Janice Shen, Mark R. Swain, Hanying Zhou, Henry Helvajian, Tom Heinsheimer, Siegfried Janson, Zigmund Leszczynski, John McVey, Darren Garber, Artur Davoyan, Seth Redfield, and Jared R. Males. Direct Multipixel Imaging and Spectroscopy of an Exoplanet with a Solar Gravity Lens Mission. *ArXiv*, 2002.11871 [astro-ph.IM], 2 2020.
- [87] Slava G. Turyshev, Henry Helvajian, Louis D. Friedman, Tom Heinsheimer, Darren Garber, Artur Davoyan, and Viktor T. Toth. Exploring the Outer Solar System with Solar Sailing Smallsats on Fast-Transit Trajectories and In-Flight Autonomous Assembly of Advanced Science Payloads. *ArXiv*, 2007.05623 [astro-ph.IM], 7 2020.
- [88] J. W. Moffat and V. T. Toth. Applying Modified Gravity (MOG) to the Lensing and Einstein Ring in Abell 3827. *Phys. Rev. D*, 103:044045, 2021.
- [89] Viktor T. Toth and Slava G. Turyshev. Image recovery with the solar gravitational lens. *Phys. Rev. D*, 103:124038, 2021.
- [90] Slava G. Turyshev and Viktor T. Toth. Diffraction of electromagnetic waves by an extended gravitational lens. *Phys. Rev. D*, 103:064076, 3 2021.
- [91] Slava G. Turyshev and Viktor T. Toth. Optical properties of an extended gravitational lens. *Phys. Rev. D*, 104:024019, 7 2021.
- [92] Slava G. Turyshev and Viktor T. Toth. Imaging point sources with the gravitational lens of an extended Sun. *Phys. Rev. D*, 104:044032, 8 2021.
- [93] J. W. Moffat and V. T. Toth. Scalar-Tensor-Vector modified gravity in light of the Planck 2018 data. *Universe*, 7(10):358, 9 2021.
- [94] Slava G. Turyshev and Viktor T. Toth. Wave-optical study of the Einstein cross formed by a quadrupole gravitational lens. *Phys. Rev. D*, 104:124033, 12 2021.

- [95] Slava G. Turyshev and Viktor T. Toth. Gravitational lensing by an extended mass distribution. *Phys. Rev. D*, 104:044013, 8 2021.
- [96] Slava G. Turyshev and Viktor T. Toth. Multipole decomposition of gravitational lensing. *Phys. Rev. D*, 105:024022, 2022.
- [97] Slava G. Turyshev and Viktor T. Toth. Recovering the mass distribution of an extended gravitational lens. *Mon. Not. R. Astron. Soc.*, 513(4):5355–5376, 7 2022.
- [98] Viktor T. Toth. Gravitoelectromagnetism and stellar orbits in galaxies. *Int. J. Mod. Phys. D*, 30(13):2150102, 2021.
- [99] J. W. Moffat and V. T. Toth. The cosmological background and the “external field” in Modified Gravity (MOG). *European Physical Journal C*, 81:836, 9 2021.
- [100] Viktor T. Toth and Slava G. Turyshev. Efficient trace-free decomposition of symmetric tensors of arbitrary rank. *Int. J. Geom. Methods Mod. Phys.*, 19(13):2250201, 2022.
- [101] Slava G. Turyshev and Viktor T. Toth. Navigating stellar wobbles for imaging with the solar gravitational lens. *Phys. Rev. D*, 105:044012, 2 2022.
- [102] Slava G. Turyshev and Viktor T. Toth. Resolved imaging of exoplanets with the solar gravitational lens. *Mon. Not. R. Astron. Soc.*, 515(4):6122–6132, 10 2022.
- [103] Slava G. Turyshev and Viktor T. Toth. Spectrally resolved imaging with the solar gravitational lens. *Phys. Rev. D*, 106:044059, 8 2022.
- [104] Henry Helvajian, Alan Rosenthal, John Poklemba, Thomas A. Battista, Marc D. DiPrinzio, Jon M. Neff, John P. McVey, Viktor T. Toth, and Slava G. Turyshev. Mission architecture to reach and operate at the focal region of the solar gravitational lens. *Journal of Spacecraft and Rockets*, Article in Advance, 2 2023.
- [105] Slava G. Turyshev and Viktor T. Toth. Evolving morphology of resolved stellar Einstein rings. *Astrophys. J.*, 944(1):25, 2023.
- [106] Slava G. Turyshev and Viktor T. Toth. Imaging faint sources with the extended solar gravitational lens. *Phys. Rev. D*, 107:104063, 5 2023.
- [107] Slava G. Turyshev and Viktor T. Toth. Spherical harmonics representation of the gravitational phase shift. *Phys. Rev. D*, 107:104031, 5 2023.
- [108] Slava G. Turyshev, Darren Garber, Louis D. Friedman, Andreas M. Hein, Nathan Barnes, Konstantin Batygin, G. David Brin, Michael E. Brown, Leroy Cronin, Artur Davoyan, Amber Dubill, Sarah Gibson, Donald M. Hassler, Noam R. Izenberg, Pierre Kervella, Philip D. Mauskopf, Neil Murphy, Andrew Nutter, Carolyn Porco, Dario Riccobono, James Schalkwyk, Kevin B. Stevenson, Mark V. Sykes, Mahmooda Sultana, Viktor T. Toth, Marco Velli, and S. Pete Worden. Science opportunities with solar sailing smallsats. *Planetary and Space Sciences*, 235:105744, 2023.
- [109] Viktor T. Toth and Slava G. Turyshev. Imaging rotating and orbiting exoplanets with the solar gravitational lens. *Mon. Not. R. Astron. Soc.*, 525(4):5846–5856, 9 2023.
- [110] J. W. Moffat and V. T. Toth. Scalar-tensor-vector-gravity and NGC-1277. *Mon. Not. R. Astron. Soc.*, 527(2):2687–2690, 2024.
- [111] Viktor T. Toth. Field theory with the Maxima computer algebra system. *ArXiv*, 2308.09837 [cs.SC], 8 2023.
- [112] Viktor T. Toth. Imaging with a gravitational lens: the geometric view. *Mon. Not. R. Astron. Soc.*, 527(1):1141–1145, 2024.
- [113] Viktor T. Toth. Gravitational anomaly detection using a satellite constellation: Analysis and simulation. *Astrophysics and Space Science*, 368:92, 2023.
- [114] Viktor T. Toth. Non-coplanar gravitational lenses and the “communication bridge”. *ArXiv*, 2310.15957 [astro-ph.IM], 10 2023.

Translations

- [115] Th. Kaluza. On the Unification Problem in Physics. *Int. J. Mod. Phys. D*, 27(14):1870001, 2018. Translation by V. T. Toth of “Zum Unitätsproblem der Physik,” *Sitzungsber. Preuss. Akad. Wiss. Berlin (Math. Phys.)* 1921, 966-972.

Magazine articles

- [116] Viktor T. Toth. Study of the Pioneer Anomaly: A scientific detective story. *The Postgraduate Magazine*, 1:24–30, 2007. Published by the School of Mathematics and Statistics, University of Newcastle Upon Tyne. Invited article.
- [117] Viktor T. Toth and Slava G. Turyshev. Finding the Source of the Pioneer Anomaly. *IEEE Spectrum*, 12 2012. Cover story.
- [118] L. Viktor Toth and Viktor T. Toth. A rádiójelekbe merülő világ (The world swallowed by radio waves – in Hungarian). *Élet és Tudomány*, 43:1360–1362, 2020.
- [119] Viktor T. Toth. On Modified Gravity. *Inference: International Review of Science*, 6(1), 4 2021. Invited Letter to the Editor.

Articles published by online media

- [120] Viktor T. Toth. Are we alone in the universe? *Forbes Tech*, July 17, 2016, <https://www.forbes.com/sites/quora/2016/07/19/are-we-alone-in-the-universe/>, 7 2016.
- [121] Viktor T. Toth. Is theoretical physics a waste of resources? *Forbes Tech*, September 14, 2016, <https://www.forbes.com/sites/quora/2016/09/14/is-theoretical-physics-a-waste-of-resources/>, 9 2016.
- [122] Viktor T. Toth. Nobody has proved Einstein wrong about relativity, but people are still trying. *Forbes Tech*, November 30, 2016, <https://www.forbes.com/sites/quora/2016/11/30/nobody-has-proved-einstein-wrong-about-relativity-but-people-are-still-trying/>, 11 2016.
- [123] Viktor T. Toth. Why Einstein’s elegant theory of relativity has stood the test of time. *Forbes Tech*, December 2, 2016, <https://www.forbes.com/sites/quora/2016/12/02/why-einsteins-elegant-theory-of-relativity-has-stood-the-test-of-time/>, 12 2016.
- [124] Viktor T. Toth. How Astronomers ‘See’ Cosmic Events From 12 Billion Years Ago. *Forbes Tech*, December 27, 2016, <https://www.forbes.com/sites/quora/2016/12/27/how-astronomers-see-cosmic-events-from-12-billion-years-ago/>, 12 2016.
- [125] Viktor T. Toth. If Energy Can’t Be Created Or Destroyed, Why Can We Use It? *Forbes Tech*, January 4, 2017, <https://www.forbes.com/sites/quora/2017/01/04/if-energy-cant-be-created-or-destroyed-why-can-we-use-it/>, 1 2017.
- [126] Viktor T. Toth. Why Can’t Scientists Find Planet 9? *Forbes Tech*, January 31, 2017, <https://www.forbes.com/sites/quora/2017/01/31/why-cant-scientists-find-planet-9/>, 1 2017.
- [127] Viktor T. Toth. Why Is the Speed Of Light Considered The Cosmic Speed Limit? *Forbes Tech*, March 13, 2017, <https://www.forbes.com/sites/quora/2017/03/13/why-is-the-speed-of-light-considered-the-cosmic-speed-limit/>, 3 2017.
- [128] Viktor T. Toth. Will The Sun Become A Black Hole When It Dies? *Forbes Tech*, March 20, 2017, <https://www.forbes.com/sites/quora/2017/03/20/will-the-sun-become-a-black-hole-when-it-dies/>, *Huffington Post*, March 21, 2017, http://www.huffingtonpost.com/entry/will-the-sun-become-a-black-hole-when-it-dies_us_58cb4f6ee4b0537abd956f77, 3 2017.

- [129] Viktor T. Toth. A History Of The Scientific Understanding Of Heat. *Forbes Tech*, March 31, 2017, <https://www.forbes.com/sites/quora/2017/03/31/a-history-of-the-scientific-understanding-of-heat/>, appeared also as The Scientific Theory That Failed Combustion Engine Advancement, *Huffington Post*, April 3, 2017, http://www.huffingtonpost.com/entry/the-scientific-theory-that-failed-combustion-engine_us_58db0cd1e4b0f087a3041e05, 3 2017.
- [130] Viktor T. Toth. Why Do General Relativity And Quantum Mechanics Need To Be Unified? *Forbes Tech*, April 13, 2017, <https://www.forbes.com/sites/quora/2017/04/13/why-do-general-relativity-and-quantum-mechanics-need-to-be-unified/>, appeared also as Why Is It Important to Reconcile Quantum Mechanics and General Relativity?, *Huffington Post*, April 14, 2017, http://www.huffingtonpost.com/entry/why-is-it-important-to-reconcile-quantum-mechanics_us_58ed3beae4b0145a227cb92e, 4 2017.
- [131] Viktor T. Toth. The Marriage Of Einstein's Theory Of Relativity And Quantum Physics Depends On The Pull Of Gravity. *Forbes Tech*, May 17, 2017, <https://www.forbes.com/sites/quora/2017/05/17/the-marriage-of-einsteins-theory-of-relativity-and-quantum-physics-depends-on-the-pull-of-gravity/>, appeared also as Can Quantum Physics and Relativity Co-Exist?, *Huffington Post*, May 18, 2017, http://www.huffingtonpost.com/entry/can-quantum-physics-and-relativity-co-exist_us_591b89fde4b0a8551f3f83f5, and as The Ongoing Conflict Between Einstein's Relativity and Quantum Physics, *Apple News*, May 23, 2017, <https://apple.news/AJ7SheeM6RXiczLhfh0iufA>, 5 2017.
- [132] Viktor T. Toth. If Time Freezes At The Edge Of A Black Hole, Could Someone Theoretically Live Forever? *Forbes Tech*, May 25, 2017, <https://www.forbes.com/sites/quora/2017/05/25/if-time-freezes-at-the-edge-of-a-black-hole-could-someone-theoretically-live-forever/>, appeared also as Is it Possible to Live Forever at the Edge of a Black Hole?, *Huffington Post*, May 30, 2017, http://www.huffingtonpost.com/entry/is-it-possible-to-live-forever-at-the-edge-of-a-black-us_592679f2e4b090bac9d46ba0, and as Since Time Freezes at the Edge of a Black Hole, Could You Live Forever There?, *Apple News*, June 4, 2017, <https://apple.news/Ag3DAwjT1RW2tzsHUrqGDPA>, 5 2017.
- [133] Viktor T. Toth. Why Nuclear Reactor Meltdowns Create Radiation That Lasts For Centuries. *Forbes Tech*, June 21, 2017, <https://www.forbes.com/sites/quora/2017/06/21/why-nuclear-reactor-meltdowns-create-radiation-that-lasts-for-centuries/>, appeared also as Nuclear Bombs and Nuclear Reactor Meltdowns Affect the Environment in Very Different Ways, *Huffington Post*, June 22, 2017, http://www.huffingtonpost.com/entry/nuclear-bombs-and-nuclear-reactor-meltdowns-affect_us_59499845e4b0c24d29f47843, 6 2017.
- [134] Viktor T. Toth. Why Does Our Sun – a White Star – Appear to Be Orange? *Huffington Post*, June 26, 2017, http://www.huffingtonpost.com/entry/why-does-our-sun-a-white-star-appear-to-be-orange_us_594c4c78e4b0c85b96c657fb, appeared also as Our Sun Is A White Star, So Why Does It Appear Orange?, *Forbes Tech*, June 27, 2017, <https://www.forbes.com/sites/quora/2017/06/27/our-sun-is-a-white-star-so-why-does-it-appear-orange/>, as What Makes the Sun Appear Orange?, *Apple News*, July 3, 2017, https://apple.news/A1Z7iw-UEQ_KA8VRacQ_E0w, as Why Does the Sun Appear Orange, *Mental Floss*, July 7, 2017, <http://mentalfloss.com/article/502581/why-does-sun-appear-orange>, and as Why Does the Sun Appear Orange on *MSN*, July 7, 2017, <http://www.msn.com/en-us/lifestyle/smart-living/why-does-the-sun-appear-orange/ar-BBDYMEN>, 6 2017.
- [135] Viktor T. Toth. Is There Anything That Can Travel Faster Than Light? *Forbes Tech*, July 13, 2017, <https://www.forbes.com/sites/quora/2017/07/13/is-there-anything-that-can-travel-faster-than-light/>,

appeared also as Why Can't Anything Move Faster Than the Speed of Light?, *Huffington Post*, July 11, 2017, http://www.huffingtonpost.com/entry/why-cant-anything-move-faster-than-the-speed-of-light_us_5963d128e4b0deab7c646acf, and as Is It True That Nothing is Faster Than Light?, *Apple News*, August 8, 2017, <https://apple.news/AG-1dGODGSKeXeDeB9IfFyA>, 7 2017.

- [136] Viktor T. Toth. Theoretical Physics Is More Important To Everyday Life Than Most People Think. *Forbes Tech*, July 18, 2017, <https://www.forbes.com/sites/quora/2017/07/18/theoretical-physics-is-more-important-to-everyday-life-than-most-people-think/>, appeared also as Why Should Normal People Bother Learning About Theoretical Physics?, *Huffington Post*, July 20, 2017, http://www.huffingtonpost.com/entry/why-should-normal-people-bother-learning-about-theoretical_us_596d8a34e4b07f87578e6bad, and as Modern Life's Practicalities Are Built on a Foundation of Theoretical Physics, *Apple News*, August 16, 2017, <https://apple.news/AHFxi6iazTa-7u8M0Q78QYA>, 7 2017.
- [137] Viktor T. Toth. Does The Universe Have Physical Boundaries? *Forbes Tech*, August 29, 2017, <https://www.forbes.com/sites/quora/2017/08/29/does-the-universe-have-physical-boundaries/>, appeared also as Does the Universe Have Physical Boundaries?, *Huffington Post*, August 30, 2017, http://www.huffingtonpost.com/entry/does-the-universe-have-physical-boundaries_us_59a505ace4b0b234aecad1e2, and as Does the Universe Have Observable Boundaries?, *Apple News*, December 16, 2017, <https://apple.news/A2m2SAZIOQSQIkYbovJ3A6A>, 8 2017.
- [138] Viktor T. Toth. What Causes Cosmic Voids? *Forbes Tech*, September 12, 2017, <https://www.forbes.com/sites/quora/2017/09/12/what-causes-cosmic-voids/>, appeared also as Why is There So Much Empty Space in Space?, *Huffington Post*, September 13, 2017, http://www.huffingtonpost.com/entry/why-is-there-so-much-empty-space-in-space_us_59b7637ee4b0678066213e3b, and as What Causes Cosmic Voids?, *Apple News*, January 4, 2018, <https://apple.news/A2-NGc19UQYC8rydaEL80Fg>, 9 2017.
- [139] Viktor T. Toth. Would The Universe Still Exist If No Life Existed To Observe It? *Forbes Tech*, September 25, 2017, <https://www.forbes.com/sites/quora/2017/09/25/would-the-universe-still-exist-if-no-life-existed-to-observe-it/>, appeared also as Would the Universe Exist If There Was No One to Observe It?, *Huffington Post*, September 25, 2017, http://www.huffingtonpost.com/entry/would-the-universe-exist-if-there-was-no-one-to-observe_us_59c8647ee4b0f2df5e83afa8, and as Would the Universe Exist If We Didn't Observe It?, *Apple News*, January 13, 2018, <https://apple.news/Au3J-0-EHRoCwhs7cPDADsQ>, 9 2017.
- [140] Viktor T. Toth. What Existed Before the Big Bang? *Huffington Post*, October 4, 2017, http://www.huffingtonpost.com/entry/what-existed-before-the-big-bang_us_59d42be9e4b0da85e7f5ecbc, appeared also in *Forbes Tech*, October 5, 2017, <https://www.forbes.com/sites/quora/2017/10/05/what-existed-before-the-big-bang/>, and as What Was There Before the Big Bang?, *Apple News*, April 23, 2018, <https://apple.news/AnpJoLY1ISZGIEfKcxu9Rtw>, 10 2017.
- [141] Viktor T. Toth. How Does a Gaseous Sun Have Gravitational Pull on Solid Planets? *Huffington Post*, October 9, 2017, https://www.huffingtonpost.com/entry/how-does-a-gaseous-sun-have-gravitational-pull-on-solid_us_59d81584e4b0cf2548b33736, appeared also as The Sun Is Not Solid But Its Gravitational Pull On Earth Is Unaffected, Here's Why, *Forbes Tech*, October 10, 2017, <https://www.forbes.com/sites/quora/2017/10/10/the-sun-is-not-solid-but-its-gravitational-pull-on-earth-is-unaffected-heres-why/>, and as How Does the Sun Have Gravitational Pull on Planets When It Is All Gas?, *Apple News*, January 20, 2018, <https://apple.news/AImdZUI1CTTOLCzLlAnEiVA>, 10 2017.

- [142] Viktor T. Toth. Do Seemingly Unsolvable Science Questions Point to a Supernatural Force? *Huffington Post*, October 26, 2017, https://www.huffingtonpost.com/entry/do-seemingly-unsolvable-science-questions-point-to_us_59f11c75e4b078c594fa150e, appeared also as What We Know (And Don't Know) About The Very Beginning Of The Universe, *Forbes Tech*, November 3, 2017, <https://www.forbes.com/sites/quora/2017/11/03/what-we-know-and-dont-know-about-the-very-beginning-of-the-universe/>, 10 2017.
- [143] Viktor T. Toth. Why Are Photons Considered Particles? *Forbes Tech*, November 14, 2017, <https://www.forbes.com/sites/quora/2017/11/14/why-are-photons-considered-particles/>, appeared also as Are Photons Particles or Electromagnetic Waves? How Can They Be Both?, *Huffington Post*, November 14, 2017, https://www.huffingtonpost.com/entry/physics-are-photons-particles-or-electromagnetic-waves_us_5a0a79fce4b060fb7e59d380, 11 2017.
- [144] Viktor T. Toth. Does Time Really Exist? According To Physics, That's The Wrong Question Entirely. *Forbes Tech*, November 28, 2017, <https://www.forbes.com/sites/quora/2017/11/28/does-time-really-exist-according-to-physics-thats-the-wrong-question-entirely/>, appeared also as Does Modern Physics Prove That Time is An Illusion?, *Huffington Post*, November 28, 2017, https://www.huffingtonpost.com/entry/does-modern-physics-prove-that-time-is-an-illusion_us_5a1d0750e4b05df68936cfed, 11 2017.
- [145] Viktor T. Toth. How Cold Is Outer Space? *Forbes Tech*, November 30, 2017, <https://www.forbes.com/sites/quora/2017/11/30/how-cold-is-outer-space/>, appeared also as Exactly How Cold Is Space?, *Huffington Post*, November 29, 2017, https://www.huffingtonpost.com/entry/exactly-how-cold-is-space_us_5a1e3adfe4b0e9a1b9c7b4f6, 11 2017.
- [146] Viktor T. Toth. How Do Quantum Fields Relate to the Way We Experience Everyday Life? *Apple News*, December 19, 2017, <https://apple.news/AEGZr10D0T0SmLEyg4R4plg>, appeared also as What Is A Quantum Field, And How Does It Interact With Matter?, *Forbes Tech*, December 20, 2017, <https://www.forbes.com/sites/quora/2017/12/20/what-is-a-quantum-field-and-how-does-it-interact-with-matter/>, and as Think Quantum Fields Are Confusing? Theyre What Were Accustomed to Calling Matter, *Huffington Post*, December 20, 2017, https://www.huffingtonpost.com/entry/think-quantum-fields-are-confusing-theyre-what-were_us_5a3946a3e4b0578d1beb7361, 12 2017.
- [147] Viktor T. Toth. Whats Missing From the Big Bang Theory? *Huffington Post*, December 22, 2017, https://www.huffingtonpost.com/entry/whats-missing-from-the-big-bang-theory_us_5a3b291de4b06cd2bd03d7f7, appeared also as Is The Big Bang Theory Incomplete?, *Forbes Tech*, December 26, 2017, <https://www.forbes.com/sites/quora/2017/12/26/is-the-big-bang-theory-incomplete/>, and as What's Missing From the Big Bang Theory?, *Apple News*, January 25, 2018, https://apple.news/AnaDY100IRMcndiX6_J5EvA, 12 2017.
- [148] Viktor T. Toth. How Do We Know There Are Black Holes? *Huffington Post*, January 3, 2018, https://www.huffingtonpost.com/entry/how-do-we-know-there-are-black-holes_us_5a4c4563e4b06cd2bd03e34b, appeared also as Are There Any Gaps In Black Hole Theory?, *Forbes Tech*, January 8, 2018, <https://www.forbes.com/sites/quora/2018/01/08/are-there-any-gaps-in-black-hole-theory/>, and as How Do We Know That Black Holes Are Really Real?, *Apple News*, January 27, 2018, <https://apple.news/A1IFF8SLYTXeQCZfoeXVJ7w>, 1 2018.
- [149] Viktor T. Toth. How Accurate Is the Term Theory of Everything in Physics? *Huffington Post*, January 10, 2018, https://www.huffingtonpost.com/entry/how-accurate-is-the-term-theory-of-everything-in_us_5a558d24e4b0baa6abf1628f, appeared also as What Does The 'Theory Of Everything' Really Mean In Physics?, *Forbes Tech*, January 10, 2018, <https://www.forbes.com/sites/quora/2018/01/10/what-does-the-theory-of-everything-really-mean-in-physics/>, 1 2018.

- [150] Viktor T. Toth. Why Are Hydrogen And Helium The Most Abundant Elements In The Universe? *Forbes Tech*, January 29, 2018, <https://www.forbes.com/sites/quora/2018/01/29/why-are-hydrogen-and-helium-the-most-abundant-elements-in-the-universe/>, appeared also as Why Are Hydrogen and Helium the Most Abundant Elements?, *Apple News*, January 31, 2018, <https://apple.news/AgBZMd6j-QTqLGBykNQm23A>, and as Pourquoi l'hydrogène et l'hélium sont-ils les éléments les plus communs de l'Univers?, *Slate FR*, January 12, 2019, <http://www.slate.fr/story/172152/physique-hydrogene-helium-elements-plus-communs-univers>, 1 2018.
- [151] Viktor T. Toth. What's Wrong With Newtonian Gravity? *Forbes Tech*, February 8, 2018, <https://www.forbes.com/sites/quora/2018/02/08/whats-wrong-with-newtonian-gravity/>, appeared also as Why Aren't Newtonian Gravity and General Relativity Compatible?, *Apple News*, February 8, 2018, <https://apple.news/AGuc8ynAwQ-6E700RzSC1ew>, 2 2018.
- [152] Viktor T. Toth. Will Quantum Physics Ever Replace the Theory of Relativity? *Apple News*, February 28, 2018, https://apple.news/AVwk30ZzfRsG9F_x740tDrQ, 2 2018.
- [153] Viktor T. Toth. What Does It Mean When Particles Are 'Entangled'? *Forbes Tech*, April 10, 2018, <https://www.forbes.com/sites/quora/2018/04/10/what-does-it-mean-when-particles-are-entangled/>, appeared also as A Simple Explanation of Quantum Entanglement, *Apple News*, April 18, 2018, <https://apple.news/ApktgJpK0SFaVEoiqvuixEA>, 4 2018.
- [154] Viktor T. Toth. How Do We Know The Universe Is Infinite? *Forbes Tech*, May 23, 2018, <https://www.forbes.com/sites/quora/2018/05/23/how-do-we-know-the-universe-is-infinite/>, appeared also as Is the Universe Infinite?, *Apple News*, May 23, 2018, https://apple.news/AU_ddYtNQTdWuUHHLLNezoQ, 5 2018.
- [155] Viktor T. Toth. Will There Ever Be Cell Phones That Don't Emit Radiation? *Forbes Tech*, June 8, 2018, <https://www.forbes.com/sites/quora/2018/06/08/will-there-ever-be-cell-phones-that-dont-emit-radiation/>, appeared also as Will There Ever Be Cell Phones That Don't Emit Radiation?, *Apple News*, June 12, 2018, <https://apple.news/AkIOoY08sTvCEhRGMCxRTKw>, 6 2018.
- [156] Viktor T. Toth. Does Anything Other Than Light Travel At The Speed Of Light? *Forbes Tech*, July 2, 2018, <https://www.forbes.com/sites/quora/2018/07/02/does-anything-other-than-light-travel-at-the-speed-of-light/>, appeared also as Does Anything Travel Faster Than Light?, *Apple News*, July 6, 2018, <https://apple.news/AKC2MNw3sQIGakoWk0qJjxw>, 7 2018.
- [157] Viktor T. Toth. How Do We Verify Facts About Black Holes? *Forbes Tech*, August 14, 2018, <https://www.forbes.com/sites/quora/2018/08/14/how-do-we-verify-facts-about-black-holes/>, appeared also as How Do We Know That Black Holes Exist?, *Apple News*, August 25, 2018, https://apple.news/ArdbybtJcQcWt_GGcj8yDOQ, 8 2018.
- [158] Viktor T. Toth. Could A City-Destroying Asteroid Ever Hit Earth Without Being Detected? *Forbes Tech*, September 13, 2018, <https://www.forbes.com/sites/quora/2018/09/13/could-a-city-destroying-asteroid-ever-hit-earth-without-being-detected/>, appeared also as Could a Comet Hit Earth Without Detection?, *Apple News*, September 13, 2018, https://apple.news/A5eol0EonQxSjS_CLteIxsg, 9 2018.
- [159] Viktor T. Toth. In The Distant Future, All Black Holes In The Universe Will Share The Same Fate. *Forbes Tech*, September 28, 2018, <https://www.forbes.com/sites/quora/2018/09/28/in-the-distant-future-all-black-holes-in-the-universe-will-share-the-same-fate/>, appeared also as What Is the Life Span of a Black Hole?, *Apple News*, October 19, 2018, https://apple.news/AEfGohqnrRRyEjW2VJ5_IvA, 9 2018.
- [160] Viktor T. Toth. Why Is The Big Bang Theory Taught If It's Just A Theory? *Forbes Tech*, October 11, 2018, <https://www.forbes.com/sites/quora/2018/10/11/why-is-the-big-bang-theory-taught-if-its-just-a-theory/>, 10 2018.

- [161] Viktor T. Toth. Does Sound Travel Faster or Slower in Space? *Mental Floss*, October 22, 2018, <http://mentalfloss.com/article/561395/does-sound-travel-faster-or-slower-space>, 10 2018.
- [162] Viktor T. Toth. When And How Will Our Sun Eventually Die? *Forbes Tech*, January 9, 2019, <https://www.forbes.com/sites/quora/2019/01/09/when-and-how-will-our-sun-eventually-die/>, appeared also as Will the Sun Ever Stop Shining?, *Apple News*, January 14, 2019, <https://apple.news/AHNDkSaHWTOOFqcPn5mpmPg> and *Mental Floss*, January 14, 2019, <http://mentalfloss.com/article/570708/will-the-sun-ever-stop-shining>, 1 2019.
- [163] Viktor T. Toth. How Many Light Years Away From the Sun Are We? *Mental Floss*, February 6, 2019, <http://mentalfloss.com/article/573367/how-many-light-years-away-sun-are-we>, 2 2019.
- [164] Viktor T. Toth. Why Is The Andromeda Galaxy Moving Towards Us If The Universe Is Expanding? *Forbes Tech*, February 21, 2019, <https://www.forbes.com/sites/quora/2019/02/21/why-is-the-andromeda-galaxy-moving-towards-us-if-the-universe-is-expanding/>, appeared also as How Is the Andromeda Galaxy Moving Towards Us If the Universe Is Expanding?, *Apple News*, March 19, 2019, <https://apple.news/AlnEUJnrUQ2KOWZHRv5es0w>, 2 2019.
- [165] Viktor T. Toth. Why Has More Than One Person Solved Einstein's Equations? *Mental Floss*, March 13, 2019, <http://mentalfloss.com/article/576865/why-multiple-people-solve-einstein-equations>, 3 2019.
- [166] Viktor T. Toth. Have We Ever Explored a Black Hole? This Answer Will Surprise You. *Apple News*, April 1, 2019, https://apple.news/A1ZYZGR0_Tv6NEKMy4-GL7A, appeared also as What Would It Take To Send A Probe All The Way To A Black Hole?, *Forbes Tech*, April 26, 2019, <https://www.forbes.com/sites/quora/2019/04/26/what-would-it-take-to-send-a-probe-all-the-way-to-a-black-hole/>, 4 2019.
- [167] Viktor T. Toth. What Is Dark Matter? *Apple News*, July 1, 2019, https://apple.news/A1B7C0g3RT1ewm6V_dPfcVA, appeared also as What Is Dark Energy?, *Forbes Tech*, July 9, 2019, <https://www.forbes.com/sites/quora/2019/07/09/what-is-dark-energy/>, 7 2019.

Bibliography last modified on November 16, 2023 15:23:20 UTC. This document was auto-generated from vttoth.bib, using the following bash script named vttoth-cite.sh:

```
#!/bin/sh
(
cat <<"EOF"
\documentclass[10pt]{article}
\usepackage{bibunits,color,listings,url}
\usepackage[papersize={8.5in,11in}]{geometry}
\geometry{left=0.75in,right=0.75in,top=1in,bottom=1in}
\renewcommand{\section}[2]{%
\begin{document}\begin{group}\raggedright
\title{\vspace{-2em}Chronological bibliography of Viktor T. Toth}\maketitle
\vspace{-2em}\date
EOF
c=0
d='date +%B%d,%Y%H:%M:%S%Z' -u -r vttoth.bib'
e=""
k=0
while read -u 10 l ; do
echo $l | grep -i "vttoth.bib" > /dev/null
if (($? != 0)) ; then
echo $l | grep -i "@comment" > /dev/null
if (($? == 0)) ; then
echo -e -n $e
echo -e -n "\\\begin{bibunit}[unsrt]\n\\subsection*"
echo -n $l | sed -e "s/@COMMENT_/gI"
cat <<EOF
}
\let\oldthebibliography=\thebibliography
\let\oldendthebibliography=\endthebibliography
\renewenvironment{thebibliography}[1]{%
\oldthebibliography{#1}%
\setcounter{enumiv}{${k}}%
}{\oldendthebibliography}
\phantom{
EOF
c=$((c+1))
e="}\n\\putbib[vttoth]\n\\end{bibunit}\n"
else
echo $l | grep "^@" >> /dev/null
if (($? == 0)) ; then
echo $(l | sed -e "s/^@[a-zA-Z]*{([,]*),/\\cite{1}/g"
k=$((k+1))
fi
fi
done 10<vttoth.bib
echo -e -n $e
cat <<EOF
\newpage
\lstset{basicstyle=\linespread{0.75}\ttfamily\small,keywordstyle=\color{blue},
stringstyle=\color{red},commentstyle=\color{green},xleftmargin=.5in}
Bibliography last modified on ${d}.
This document was auto-generated from {\tt vttoth.bib},
using the following bash script named {\tt vttoth-cite.sh}:
\vskip .125in
\lstinputlisting[language=bash]{vttoth-cite.sh}
\endgroup\end{document}
EOF
latex vttoth-cite.tex
for i in $(seq 1 $c); do bibtex bu$i >&2 ; done
) > vttoth-cite.tex
latex vttoth-cite.tex
latex vttoth-cite.tex
rm bu?.blg bu?.bbl bu?.aux
dvi2pdf vttoth-cite
```