



# GRAVITY RESEARCH FOUNDATION

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**The trustees are pleased to announce the Awards for Essays for 2015.**

1. \$4,000 - **Local Conformal Symmetry: the Missing Symmetry Component for Space and Time** by Gerard 't Hooft, Institute for Theoretical Physics, Utrecht University and Spinoza Institute, Postbox 80.195, 3508 TD Utrecht, the Netherlands; e-mail: [g.thoof@uu.nl](mailto:g.thoof@uu.nl)
2. \$1,250 - **Gravity as the Breakdown of Conformal Invariance** by Giovanni Amelino-Camelia<sup>[1]</sup>, Michele Arzano<sup>[1]</sup>, Giulia Gubitosi<sup>[2]</sup>, and João Magueijo<sup>[2]</sup>, <sup>[1]</sup>Dipartimento di Fisica, Università La Sapienza and Sez. Roma1 INFN, P.le A. Moro 2, 00185 Roma, Italia, <sup>[2]</sup>Theoretical Physics, Blackett Laboratory, Imperial College, London, SW7 2BZ, United Kingdom; e-mail: [giovanni.amelino-camelia@roma1.infn.it](mailto:giovanni.amelino-camelia@roma1.infn.it), [michele.arzano@roma1.infn.it](mailto:michele.arzano@roma1.infn.it), [g.gubitosi@imperial.ac.uk](mailto:g.gubitosi@imperial.ac.uk), [j.magueijo@imperial.ac.uk](mailto:j.magueijo@imperial.ac.uk)
3. \$1,000 - **Nature Abhors a Horizon** by Per Kraus<sup>[1]</sup> and Samir D. Mathur<sup>[2]</sup>, <sup>[1]</sup>Department of Physics and Astronomy, UCLA, Los Angeles, CA 90095-1547, <sup>[2]</sup>Department of Physics, The Ohio State University, Columbus, OH 43210; e-mail: [pkraus@ucla.edu](mailto:pkraus@ucla.edu), [mathur.16@osu.edu](mailto:mathur.16@osu.edu)
4. \$750 - **Fractionated Branes and Black Hole Interiors** by Emil J. Martinec, Enrico Fermi Inst. and Dept. of Physics, University of Chicago, 5640 S. Ellis Ave., Chicago, IL 60637-1433; e-mail: [e-martinec@uchicago.edu](mailto:e-martinec@uchicago.edu)
5. \$500 - **The Essence of Gravitational Waves and Energy** by F. I. Cooperstock, Department of Physics and Astronomy, University of Victoria, P.O. Box 3055, Victoria, B.C. V8W 3P6, Canada; e-mail: [cooperst@uvic.ca](mailto:cooperst@uvic.ca)

**Selected for Honorable Mention this year were (listed in alphabetical order):** Tim Adamo; N. Afshordi, R. B. Mann, and R. Pourhasan; Dharam Vir Ahluwalia, Lance Labun, and Giorgio Torrieri; Shreya Banerjee, Sayantani Bera, and Tejinder P. Singh; Tom Banks; Carlos Barceló, Raúl Carballo-Rubio, and Luis J. Garay; John D. Barrow and Alexander A. H. Graham; Eric Bergshoeff, Wout Merbis, Alasdair J. Routh, and Paul K. Townsend; Swastik Bhattacharya and S. Shankaranarayanan; Eugenio Bianchi, Lucas Hackl, and Nelson Yokomizo; N. E. J. Bjerrum-Bohr, John F. Donoghue, Basem Kamal El-Menoufi, Barry R. Holstein, Ludovic Planté, and Pierre Vanhove; Xián O. Camanho, José D. Edelstein, and Alexander Zhiboedov; Massimo Cerdonio and Carlo Rovelli; Saurya Das; Upasana Das and Banibrata Mukhopadhyay; Aharon Davidson and Ben Yellin; John Bruce Davies; Laurent Freidel, Robert G. Leigh, and Djordje Minic; M. Gasperini; A. Gruppuso and A. Sagnotti; Carlos A. R. Herdeiro and Eugen Radu; Shahar Hod; Preston Jones and Douglas Singleton; Prado Martín-Moruno and Nelson J. Nunes; Ali Masoumi; Eduard G. Mychelkin and Maxim A. Makukov; T. Padmanabhan; Maulik Parikh; Jeremy Sakstein and Kazuya Koyama; Ashoke Sen; C. Sivaram; Joan Solà; C. S. Unnikrishnan and George T. Gillies; Aron C. Wall.

This announcement and abstracts of award-winning and honorable mention essays will be posted when ready on our web site, <http://www.gravityresearchfoundation.org>. The five award-winning essays will be published in a special issue of the International Journal of Modern Physics D (IJMPD). They will also be posted at a later date on our web site.