

Cottrell Papers and Publications

SCIENTIFIC PUBLICATIONS BY DR. LES COTTRELL

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Books:

Writing CGI Scripts in REXX

by Les Cottrell. Chapter 30 in "HTML 3.2 and CGI Unleashed", J. December and M. Ginsburg, pp 861-876, Published by [Sams.net](#) Publishing ISBN 1-57521-177-7.

The Internet, Mobile Computing and Mobile Phones in Developing Countries,

Chapter 1 (pp 7-36), in "m-Science Sensing, Computing and Dissemination" Editors E. Canessa and M. Zennaro, Published by ICTP - The Abdus Salam International Center for Theoretical Physics, Nov 2010, ISBN 92-95003-43-8

Interviews

[AIP Interview with Les Cottrell](#), April 2021.

[Mapping the Digital Divide](#), Interview with Symmetry Magazine, 8/2/2008

[Running](#), SLAC Today, 5/7/2008

[Les Cottrell: Bringing the Internet to China](#), Symmetry Magazine, 11/1/2005

Reports:

Annual reports of the International Committee for Future Accelerators (ICFA) Standing Committee on Inter-Regional Connectivity (SCIC) Network Monitoring Reports: 2002-2017

What's next; An Aria With Hiccups: The Music of Data Networks.

Published by the New York Times see <http://www.nytimes.com/2002/12/19/technology/what-s-next-an-aria-with-hiccups-the-music-of-data-networks.html>

Patent:

Image Transformations on an Interactive Raster Scan or Matrix Display.

Alan Stanley Murphy, Roger Leslie Cottrell, US patent 4,688,181 date August 18, 1987

SLAC WWW Wizard Les Cottrell:

First U.S. Website: Documentation of the Early Web at SLAC (1991-1994). The First North American Web site. See more at: <https://www.scrumalliance.org/community/profile/lcottrell>

Papers

The First Permanent International Computer Network Connection Between China and the USA

[R. L. A. Cottrell](#), R. S. Xu,

Invited [talk](#) at the Symposium on 30 years of BES Physics held at the Institute of High Energy Physics, Beijing, P. R. China, from September 5 to 6, 2019.

Also, see the [paper](#) submitted to the BES Symposium.

OSTI reference <https://www.osti.gov/servlets/purl/1834055>

Substituting Missing Values in End-to-end Internet Performance Measurements using k-Nearest Neighbors

Saqib Ali, Guojun Wang, Xiaofei Xing, Roger Leslie Cottrell, 2017 IEEE International Symposium on Parallel and Distributed Processing with Applications and 2017 IEEE International Conference on Ubiquitous Computing and Communications (ISPA/IUCC)

A Blockchain-based Decentralized Data Storage and Access Framework for PingER.

Saqib Ali, Guojun Wang, Bebo White, Roger Leslie Cottrell, 2018 17th IEEE International Conference On Trust, Security And Privacy In Computing And Communications/ 12th IEEE International Conference On Big Data Science And Engineering

Internet Performance Analysis of South Asian Countries using End-to-End Internet Performance Measurements.

Saqib Ali, Guojun Wang, Roger Leslie Cottrell, Sara Masood, 2017 IEEE International Symposium on Parallel and Distributed Processing with Applications and 2017 IEEE International Conference on Ubiquitous Computing and Communications (ISPA/IUCC)

High Performance Data Transfer for Distributed Data Intensive Sciences.

Chin Fang, (Zettar, Inc., Mountain View, CA), R 'Les' A. Cottrell, Andrew B. Hanushevsky, Wilko Kroeger, Wei Yang, (SLAC) . SLAC-TN-16-001, Sep 2016.

Applying Data Warehousing and Big Data Techniques to Analyze Internet Performance.

T.M.S. Barbosa, R. Souza, S.M.S. Cruz, M.L. Campos, R.Les Cottrell, (SLAC) .

SLAC-PUB-16464, Dec 2015. 6pp.

Presented at the 4th International Conference on Internet Applications, Protocols and Services (NETAPPS2015), 1-3 Dec 2015, Cyberjaya, Malaysia.

Adaptive Geolocation of Internet Hosts.

Raja A.A. Khan, (NUST, Rawalpindi), Anjum Naveed, (Malaya U.), R.Les Cottrell, (SLAC). SLAC-PUB-16463, Dec 2015. 3pp.

Presented at the 4th International Conference on Internet Applications, Protocols and Services (NETAPPS2015), 1-3 Dec 2015, Cyberjaya, Malaysia.

PingER Malaysia-Internet Performance Measuring Project: A Case Study.

Saqib Ali, R.Les Cottrell, Anjum Naveed, (SLAC) . SLAC-PUB-16462, Dec 2015. 6pp.

Presented at the 4th International Conference on Internet Applications, Protocols and Services (NETAPPS2015), 1-3 Dec 2015, Cyberjaya, Malaysia.

Worldwide Internet Performance Measurements Using Lightweight Measurement Platforms.

R.Les Cottrell, Thiago Barbosa, Bebo White, (SLAC), Jophari Abdullah, (UMalaysia U., Sarawak), Topher White, (Rainforest Connection) . SLAC-PUB-16461, Dec 2015. 6pp.

Presented at the 4th International Conference on Internet Applications, Protocols and Services (NETAPPS2015), Dec.1-3, 2015, Cyberjaya, Malaysia.

A Survey On Big Data Indexing Strategies.

Fatima Binta Adamu, Adib Habbal, Suhaidi Hassan, (U. Utara Malaysia) , R.Les Cottrell, Bebo White, (SLAC) , Ibrahim Abdullah, (U. Utara Malaysia) .

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Presented at the 4th International Conference on Internet Applications, Protocols, and Services (NETAPPS2015), Dec.1-3, 2015, Cyberjaya, Malaysia.

Linked Open Data Publication Strategies: Application in Networking Performance Measurement Data.

Renan Souza, (UFRJ, Rio de Janeiro) , Les Cottrell, Bebo White, (SLAC) , Maria L. Campos, Marta Mattoso, (UFRJ, Rio de Janeiro) . SLAC-PUB-15950, May 2014. 7pp.

2014 ASE BigData, SocialCom, CyberSecurity Conference, Stanford University, California, May 27 - 31, 2014.

The Emergence of the Internet and Africa.

Les Cottrell, (SLAC). SLAC-WP-095, May 2013. 50pp.

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C.E. Barton, (Australian Natl. U., Canberra) , C. Amory-Mazaudier, (Lab.Phys.Plasmas, Saint Maur des Fosses) , B. Barry, (Assoc.African Univ., Accra) , C. hukwuma, (Olabisi Onabanjo U.) , R.L. Cottrell, (SLAC) , U. Kalim, (Pakistan Natl. U.) , A. Mebrahtu, (Mekelle U.) , M. Petitdidier, (Lab. d'Atmos., Velizy) , B. Rabiu, (Federal Tech. U., Akure) , C. Reeves, (Earthworks bv, Delft) . SLAC-PUB-13852, Jun 2010. 25pp.

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Digital Divide in Sub-Saharan Africa Universities: Recommendations and Monitoring.

Boubakar Barry, (Assoc. Afr. Univ.) , Victor Chukwuma, (Olabisi Onabanjo U.) , Monique Petitdidier, (CEPT, Velizy) , Les Cottrell, (SLAC) , Charles Bartons , (Australian Natl. U., RSES) . SLAC-PUB-13853, Dec 17, 2009. 11pp.

Quantifying and Mapping the Digital Divide from an Internet Point of View.

R.Les Cottrell, (SLAC) , Shahryar Khan, (NUST, Rawalpindi) , Jerrod Williams, (SLAC) , Akbar Mehdi, Umar Kalim, Arshad Ali, (NUST, Rawalpindi) .

SLAC-PUB-13398, Sep 18, 2008. 13pp.

Quantifying the Digital Divide: A Scientific Overview of Network Connectivity and Grid Infrastructure in South Asian Countries.

Shahryar Muhammad Khan, (SLAC & NUST, Rawalpindi) , R.Les Cottrell, (SLAC) , Umar Kalim, Arshad Ali, (NUST, Rawalpindi) . SLAC-PUB-12851, Oct 30, 2007. 11pp.

Presented at International Conference on Computing in High Energy and Nuclear Physics (CHEP 07), Victoria, BC, Canada, 2-7 Sep 2007.

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Presented at 4th Asian Applied Computing Conference (AACC 2007) on Bridging the Digital Divide, Kathmandu, Nepal, 8-10 Jun 2007.

Scientific Measure of Africa's Connectivity.

M. Zennaro, E. Canessa, K.R. Sreenivasan, (ICTP, Trieste) , A.A. Rehmatullah, R.L. Cottrell, (SLAC) . SLAC-PUB-11832, Apr 24, 2006. 14pp.
Submitted to Information Technology and International Development.

Evaluation of Techniques to Detect Significant Network Performance Problems using End-to-End Active Network Measurements.

R.Les Cottrell, Connie Logg, Mahesh Chhaparia, (SLAC) , Maxim Grigoriev, (Fermilab) , Felipe Haro, (Chile U., Catolica) , Fawad Nazir, (NUST, Rawalpindi) , Mark Sandford, (Loughborough U.) . SLAC-PUB-11653, Jan 25, 2006. 11pp.
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Proposal for a Magnetic Detector for PEP.

D. Cutts *et al*, R.Les Cottrell, (SLAC). PEP-PROPOSAL-008, Dec 1976. 105pp.

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A Search for Parity Violation in the Inelastic Scattering of Polarized Electrons from Deuterium at 19.4-GeV.

C.Y. Prescott *et al*, R.Les Cottrell, (SLAC). 1976. Presented at Conf. on High Energy Physics with Polarized Beams and Targets, Argonne, Ill., 1976., Vol. II*, Dubna 1976, B55-b56.

Preliminary Results from a Recent Experiment on Inclusive Deep Inelastic Scattering.

W.B. Atwood, Elliott D. Bloom, R.L.A. Cottrell, H. DeStaeblcr, M. Mestayer, C.Y. Prescott, L.S. Rochester, S. Stein, Richard E. Taylor, D. Trines, (SLAC) . Jul 1974. 2pp.
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Measurements Of Inelastic Electron Scattering Cross-Sections Near One Pion Threshold.

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J.S. Poucher *et al*, R.Les Cottrell, (SLAC). SLAC-PUB-1309, Dec 1973. 27pp.
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