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- 2014 IEEE 15th International Conference on HPSR

W.A.L.L. INSTITUTE FOR ADVANCED STUDIES

An Evening on TIME

7.30 pm, June 5th, Hebb theatre, 2045 W. Mall, UBC Campus

**Sir Tony Leggett (Urbana, USA),
Nobel Prize for Physics, 2003:
will talk on
Why can't time run backwards?**

**Sir Roger Penrose (Oxford, UK)
will talk on
Seeing through the Big Bang
to another World?**

**For more details on the talks and the speakers,
go to:
http://pitp.physics.ubc.ca/quant_lect/2014/Penrose_Leggett.html**

**Each speaker will talk for 40 mins;
this will be followed by a
Question & Answer session
involving the audience**

PiTP

Everyone has at some point asked themselves questions about TIME: what is it, what is the "flow of time", why can't time "flow backwards", can we travel in time or 'change our time'; and so on. Other questions that would have been hard to imagine before the 20th century include: when did time begin (and will it end), what is 'spacetime', or 'singularities in spacetime' (like black holes or the 'Big Bang').

Two of the world's greatest experts on this sort of question are Profs Tony Leggett & Roger Penrose. They will be each presenting their views on the topic, in 40 min public lectures designed for a broad audience. The lectures will start at 7.30 pm; they will be followed by a "Question & Answer" discussion session involving the audience, and we aim to finish by 9.30 pm. There will be no admission charge or registration but it would be a good idea to **arrive reasonably early**.



**Bill Carman
Safearth**

Monday 26 May

5:30pm - 6:30pm

BC Hydro Edmonds

Auditorium

Information

Jeff.Bloemink

IAS Chair

Jeff.Bloemink@powertechlabs.com

What on earth is happening in grounding?

Advances in electrical grounding shock management

Earthing systems have been implemented since the inception of power reticulation, and to the uninitiated bystander it would appear that little has changed in the intervening period. Equipment is still bonded together and connected to the 'general mass of earth' by copper conductors and electrodes. Some would argue that progress has been made, as rather than simplified empirical equations, modern computer programs are now producing impressive confidence inspiring colourful graphs. While this assessment is certainly superficial some people have no intention of looking deeper to check that each stage of the design decision making process is correctly supported.

In a similar manner some asset owners consider that the use of supposed 'conservative assumptions' are enabling them to sidestep the need for detailed testing, modeling and commissioning testing. Thankfully these are now a shrinking minority, as it is now more clearly understood that the use of appropriate analysis and testing is required in order to demonstrate that an owner's duty of care to utility staff and the public has been met for both safety and cost justification.

This presentation will address the changes that have been introduced in industry guidelines and standards over the last 10 years to promote responsible management of grounding system related risk, and provide

asset owners and designers with appropriate guidance. Robust design, installation and commissioning processes and tools that are now available to support a designer are also discussed. The work to be undertaken by the new Cigre B3:35 working group regarding the incorporation of quantified risk analysis into grounding system design will also be introduced.

Speaker: Bill Carman BE(Elec)(Hons I), PhD, FIEAust, CPEng, MIEEE. Bill specialised in the management of grounding system and lightning related risks within Australian power utilities for over 30 years. Since 1982 he has been closely involved in grounding system design and testing, R&D projects, and training throughout Australia and the Asian region. As the Principal Consultant of the Safearth team over a 25 year period Bill worked with a wide range of clients from generation, transmission to distribution, as well as industrial users and mining installations.

He received his BE(Elec)(Hons I) in 1982, and Doctorate in the area of earthing system risk quantification and design in 2002, and is a conjoint Senior Lecturer with the Engineering School at Newcastle University. Bill is active in Australian and international standards and industry committees. He is the chair of the Cigre B3:35 committee investigating the integration of quantified risk in grounding system design and operation.

IEEE Industry Applications Society

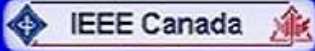


IEEE Vancouver new Senior Members named at the April 2014 meeting of the A&A committee:

Jahangir Khan
Sudip Shekhar
Boris Stoeber

Electrical Power and Energy Conference

Partnership between Industrial Users and Power Providers



November 12 - 14, 2014, Calgary, Alberta, Canada

Call for Papers

Fourteenth annual Electrical Power and Energy Conference (EPEC 2014) will take place in Calgary, AB, Canada from November 12 to 14, 2014. The objective of EPEC 2014 is to provide a forum for the exchange of electrical application technology related to electrical power and energy generation, transmission, distribution and utilization. The focus of this year's conference will be on partnerships between industrial users and power providers by bringing together industrial users,

Topics

Papers are invited on all topics of interest related to electric power and energy, especially papers with the following focus:

1. Industrial Systems Designation Partnerships
2. Renewable power generation .Integration challenges .New technology developments
3. Co-generation .New developments .Integration
4. Controls .61850 'Goose Messaging'
5. Grounding philosophy
6. Reactive power
7. Large Drives .Challenges .Applications
8. Regulation/Deregulation .Experience in Alberta and other places .Future developments .Integrated system modeling & dynamics
9. Protection .Renewable energy integration .New developments
- 10 Interoperability in smarter grids

Paper Submission

EPEC 2014 invites two types of submissions;

- (1) Full papers in English with maximum six pages in double column format and Power Point presentations, or
- (2) Three hundred word abstract/summary and Power Point presentations.

Papers and Power Point Presentations must comply with IEEE formatting requirements.

Detailed information on paper format and submission procedure can be found on the conference website <http://sites.ieee.org/epec2014>.

Full papers presented at the conference will be included in EI Compendex, IEEE Xplore and ISI.

Last date for the submission of papers, both full and abstract/summary for Power Point presentation, is May 31, 2014.



IEEE Signal Processing Society

Summer school on signal processing and machine learning for big data

Call for Participation

The University of British Columbia, Vancouver, BC, Canada

July 29 - August 1, 2014

MOTIVATION AND DESCRIPTION Humans, machines and sensors collectively generate an enormous amount of data on a daily basis. The fact that much of this data is now accessible provides an opportunity to explore, analyze and extract previously unavailable and potentially highly useful information. In many cases, the volume and speed of data generation makes traditional centralized data analysis infeasible. The lack of structure, and the amount of noise and outliers emphasize the need for robust processing across heterogeneous data domains. High dimensionality makes it challenging to visualise and interpret the data. Overall, Big Data

analysis presents many challenges and opportunities for current and future signal processing professionals. This Summer School is intended to provide an introduction to the current efforts to explore Big Data from a signal processing perspective. Topics will range from foundations for Big Data analysis and processing (robust statistical methods, sparse representations, numerical linear algebra, machine learning, convergence and complexity analysis) to Big Data applications (social networks, behavior and language analysis, bioinformatics, smart grid, environmental monitoring, and others)

IMPORTANT DATES

Registration deadline: July 15, 2014
School dates: July 29 - August 1, 2014

The School will take place at the University of British Columbia, Vancouver campus.

<https://sites.google.com/site/s3pbigdata2014/registration>
(Will be open soon)

	Students	Others	Single day
	Full	Full	
IEEE SPS Member	\$50	\$300	\$100
IEEE Member	\$200	\$500	\$200
Non-Member	\$400	\$800	\$500

REGISTRATION Registration fees are listed in Canadian Dollars. Check the website for further information and application details.



Information

Signal Processing Chair
Ivan Bajic
ivan_bajic@ieee.org



“Humanitarian advancement through technology”

June 1-4, 2014, Montreal, Canada
OMNI Hotel, Mont-Royal, Montreal

Cosponsored by: IEEE Canada, Montreal Section, Ottawa Section, Toronto Section, Vancouver Section, Northern Canada Section, and Newfoundland and Labrador Section



Call for Papers

The 2014 IEEE International Humanitarian Technology Conference (IHTC) will be held in Montreal, Canada from June 1-4, 2014. The conference will focus on humanitarian applications of technology in the general areas of technologies for improving the lives of underserved peoples (including aboriginal/indigenous peoples), technologies for the disabled, health-related technologies, humanitarian engineering educational programs, and technologies to assist in disaster situations. The conference will feature outstanding keynote speakers, workshops, a student paper competition and peer-reviewed papers. Technology-oriented papers and papers describing social and economic factors related to humanitarian technology implementation are welcome for the conference.

The technical program committee for the 2014 IEEE IHTC invites you to submit a 200-300 word abstract of a paper in any of the following track areas:

1. Mobile Health (mHealth), Medical Technology, and Telemedicine
2. Operations, supply chain and logistics in humanitarian aid and disaster response
3. Water and Agricultural Technologies
4. Off-grid Power, Renewable Energy and Resilient Power Grids
5. Connectivity and Communications Technologies
6. Humanitarian and/or Sustainable Engineering Programs, Educational Technologies, Course Materials, and Curricula
7. Data and Personal Security Technologies for Humanitarian Applications
8. Underwater Wireless Communications for Humanitarian Applications
9. Underwater Robotics for Humanitarian Applications
10. Community Engagement and Social and Economic Factors in Humanitarian Engineering

Paper Submission

The format of the paper should follow the IEEE conference papers style. IHTC 2014 will only accept the electronic submission of a full paper in English with maximum six pages on line by uploading the PDF-format file to <http://www.bytematters.com/veda/ihtc.aspx>. Detailed information on paper format and submission procedure can be found on the conference website. IHTC 2014 proceedings are included in IEEE Xplore.

Technical Co-Chairs Contacts at Emails:
pripal.singh@villanova.edu
and mohamad.sawan@polymtl.ca

Important Dates

Deadline for Abstract Submission January 20, 2014
Notification of Abstract Acceptance January 31, 2014
4-page IEEE format Full Paper Due February 28, 2014
Reviewer's Feedback to Authors March 31, 2014
Camera-Ready Papers and Copyright Forms Due April 30, 2014

Exhibitions

There will be an exhibition site at the conference. Companies and institutions who are interested are encouraged to contact the exhibition chair for further information.

For more information on IHTC'2014, please contact: Ferial El-Hawary, General Chair c/o Dept of Electrical and Computer Engineering, Dalhousie University Halifax, NS, Canada B3H 4R2
Tel: +1(902) 494-3911 Fax: +1(902) 422-7535
E-mail: F.El-Hawary@ieee.org

For detailed up-to-date information, visit the IHTC2014 Conference
Web site: www.ihtc.ieee.ca



2014 IEEE 15th International Conference on High Performance Switching & Routing Vancouver, British Columbia, July 1 to July 4, 2014

Vancouver is world renowned for its diversity of many cultures and ethnicities. It is an ideal place for scientists and engineers from around the world to gather and share their ideas.

With the unprecedented growth of the Internet as a backbone for communications and information services, it is essential that researchers gather to share their ideas and progress on solving the future challenges that the Internet faces. They include bridging the digital-divide and providing advantages of the Internet to developing

countries; handling the bandwidth and delay requirements of multi-media, P2P, and cloud computing applications; implementing IPv6 and migrating from IPv4; deploying large datacenters and enhancing their switching capabilities; and achieving energy efficiency of switching and routing equipment.

These are only a few of the topics that have demanded switching and routing capabilities that are more intelligent, efficient, and reliable than ever before.

IEEE HPSR 2014 will address the following topics

- Architectures of high-performance switches and routers
- High-speed packet processors
- Address lookup algorithms
- Packet classification, scheduling, and dropping
- Switching, bridging, and routing protocols
- Latency and buffer control
- Multicasting
- P2P routing
- Routing in wireless, mobile and sensor networks
- Optical switching and routing
- Switching, bridging, and routing in data centers and clouds
- Software defined networking
- Data placement and migration
- Multiprocessor networks
- Network management
- Pricing, accounting, and charging
- QoS and scalability of switching, bridging, and routing
- Traffic characterization and engineering
- Power-aware switching, bridging, and routing protocols
- High-speed network security

General Chairs: Ljiljana Trajkovic (Simon Fraser University), Andrzej Jajszczyk (AGH University of Science and Technology)
<http://www.ieee-hpsr.org/>