

**70th Meeting of IFIP WG 10.4**  
**June 24-27, 2016**  
**Sorèze, France**



# Business Meeting Agenda

- Historical Perspective and Memorabilia: *«70 meetings later»*
- IEEE/IFIP DSNs - DSN-2016 wrap-up, DSN 2017
- Upcoming events: Future DSNs and other sponsored events ...
- Awards
- Future WG Meetings AND workshops
- Workshop ideas
- **Members only portion**



June 24-27 2016, Sorèze, FR

# Historical Perspective and Memorabilia

“Enablers”

Jean Arlat, Yves Crouzet, Rick Schlichting



70th Meeting of IFIP WG 10.4, June 24-27, Sorèze, FR



# IFIP Working Group 10.4 Dependable Computing and Fault Tolerance 70th Meeting



Animated page reachable from  
<http://www.dependability.org/wg10.4/>

## Working Group Meetings — 1981-2016

- |                                 |                                  |                                |                                      |                                |                                 |                               |
|---------------------------------|----------------------------------|--------------------------------|--------------------------------------|--------------------------------|---------------------------------|-------------------------------|
| 1- Portland, ME, US, 1981       | 11- Pointe du Bout, MQ, FR, 1987 | 21- Maui, HI, US, 1992         | 31- Garmisch-Partenkirchen, DE, 1997 | 41- Saint John, VI, US, 2002   | 51- Le Gosier, GD, FR, 2007     | 61- Sainte Luce, MQ, FR, 2012 |
| 2- Marina del Rey, CA, US, 1982 | 12- Macatawa, MI, US             | 22- Eastham-Cape Cod, MA, US   | 32- Seattle, WA, US                  | 42- Hilton Head Island, SC, US | 52- Edinburgh, SCT, GB          | 62- Rockport, MA, US          |
| 3- Le Gosier, GD, FR, 1983      | 13- Panjim, Goa, IN, 1988        | 23- Islamorada, FL, US, 1993   | 33- Cape Town, SE, 1998              | 43- Sal, CV, 2003              | 53- Natal, RN, BR, 2008         | 63- Tavira, PT, 2013          |
| 4- Como, IT                     | 14- Gotemba, JP                  | 24- Sarlat, FR                 | 34- Tegernsee, DE                    | 44- Monterey, CA, US           | 54- Girdwood, AK, US            | 64- Visegrád, HU              |
| 5- Launceston, TAS, AU, 1984    | 15- Djerba, TN, 1989             | 25- San Diego, CA, US, 1994    | 35- Kahuku, HI, US, 1999             | 45- Moorea, PF, FR, 2004       | 55- Cortina d'Ampezzo, IT, 2009 | 65- Sorrento, IT, 2014        |
| 6- Orlando, FL, US              | 16- Zion, IL, US                 | 26- Horseshoe Bay, TX, US      | 36- Fontana, WI, US                  | 46- Siena, IT                  | 56- Óbidos, PT                  | 66- Amicalola, GA, US         |
| 7- Le Diamant, MQ, FR, 1985     | 17- Trois Ilets, MQ, FR, 1990    | 27- Saint Thomas, VI, US, 1995 | 37- Pointe du Bout, MQ, FR, 2000     | 47- Rincón, PR, US, 2005       | 57- Ishigaki, JP, 2010          | 67- Tortworth, ENG, GB, 2015  |
| 8- Montebello, QC, CA           | 18- Ambleside, ENG, GB           | 28- Lake Tahoe, CA, US         | 38- Kerhonkson, NY, US               | 48- Hakone, JP                 | 58- Chicago, IL, US             | 68- Búzios, RJ, BR            |
| 9- Malibu, CA, US, 1986         | 19- Grand Canyon, AZ, US, 1991   | 29- Trois Ilets, MQ, FR, 1996  | 39- Paraty, RJ, BR, 2001             | 49- Tucson, AZ, US, 2006       | 59- Snowmass, CO, US, 2011      | 69- Aspen, CO, US, 2016       |
| 10- Baden, AT                   | 20- Quebec City, QC, CA          | 30- Appi, JP                   | 40- Stenungsund, SE                  | 50- Annapolis, MD, US          | 60- Taoyuan, TW                 | 70 - Sorèze, FR               |

# IEEE/IFIP International Conference on Dependable Systems and Networks



## ■ Toulouse, France (2016)

- ◆ General co-Chairs: **Karama Kanoun, Mohamed Kaaniche** (LAAS-CNRS, France)
- ◆ Program co-Chairs: **Cristina Nita-Rotaru** (Purdue Univ., US), **Domenico Cotroneo** (U. Naples Federico II, IT)

# Upcoming Events

# IEEE/IFIP International Conference on Dependable Systems and Networks



## ■ Denver, CO, US (2017)

- ◆ General Chair: **Shivakant Misra** (University of Colorado, Boulder, US)
- ◆ Program co-Chairs: **Evgenia Smirni** (College of William and Mary, US), **Pascal Felber** (Univ. Neuchatel, CH)

## ■ Luxembourg City, Luxembourg (2018)

- ◆ General Chair: **Paulo Esteves-Veríssimo** (University of Luxembourg, Luxembourg)
- ◆ Program co-Chairs: **TBD**

- DSN 19 : two proposals from the USA
- Cristian Constantinescu for Portland, Oregon.
- Bojan Cukic for Charlotte, North Carolina.

# Other, in-collaboration or related events

- EDCC 2016, Gothenburg, Sweden, September 5-9, 2016
- PRDC 2017, Christchurch, New Zealand, 22-25 jan 2017
- LADC 2016, Cali, Colombia, October 19-21, 2016
- SAFECOMP, Norway, 2016

# Award Updates

# Award Updates

**NEW in 2016!**

- William C. Carter PhD Dissertation Award in Dependable Computing has changed!
  - ◆ Scope: significant contribution to the field of dependable computing through his or her graduate dissertation research
  - ◆ Committee: picked by TC and IFIP WG chairs
- The award is sponsored by IEEE TC-FTC and IFIP WG 10.4
- URL: [www.dsn.org](http://www.dsn.org)
- The award is presented at DSN by a short talk of the awardee

# Award Updates

## ■ William C. Carter PhD Dissertation Award in Dependable Computing 2016

- ◆ Scope: significant contribution to the field of dependable computing through his or her graduate dissertation research
- ◆ Committee:
- ◆ Roberto Baldoni, *Chair*, Ken Birman, Xavier Defago, Christof Fetzer, Arun Somani

## ■ URL: [www.dsn.org](http://www.dsn.org)

## ■ The winner of the DSN 2016 edition was:

- ◆ Sebastiano Peluso (University of Rome La Sapienza and Instituto Superior Técnico Lisboa) with the dissertation entitled "Efficient Protocols for Replicated Transactional Systems".

# Award Updates

- DSN Best paper award
  - ◆ Scope: Best paper accepted and presented at DSN.
  - ◆ Committee: joint sequenced decision of: PC -> SC -> DSN audience
  - ◆ Selection:
    - ✦ Starts during PC meeting, ends during DSN
- URL: [www.dsn.org](http://www.dsn.org)
- Final decision during DSN, you can participate in the vote

# Award Updates

- **Jean-Claude Laprie Award in Dependable Computing**
  - ◆ **Scope:** Outstanding paper(s) have significantly influenced the theory and/or practice of dependable computing.
  - ◆ **Committee:** appointed by IFIP WG10.4 chair
  - ◆ **Selection:**
    - ✦ Through winter
- **URL:** <http://www.dependability.org/wg10.4/laprie-award.html>

# Award Updates

- **Jean-Claude Laprie Award in Dependable Computing (2016)**
  - ◆ **Scope:** Outstanding paper(s) have significantly influenced the theory and/or practice of dependable computing.
  - ◆ **Committee:** appointed by IFIP WG10.4
    - Takashi Nanya (University of Tokyo, JP), Chair;
    - Henrique Madeira (University of Coimbra, PT);
    - Jay Lala (Raytheon, USA);
    - Neeraj Suri (TU Darmstadt, DE);
    - Charles Weinstock (SEI-CMU, USA).
  - ◆ **Selection:**
    - ✦ finished
- **URL:** <http://www.dependability.org/wg10.4/laprie-award.html>
- **Winner(s):**
  - ◆ "Design of Dynamically Checked Computers", by W.C. Carter and P.R. Schneider, Proc. IFIP Congress, Vol.2, Edinburgh (UK), North-Holland,(1968).
  - ◆ "Basic concepts and taxonomy of dependable and secure computing", by A. Avizienis, J.C. Laprie, B. Randell and C. Landwehr, IEEE Trans. on dependable and secure computing. Vol.1. No.1, pp.1 - 23, (2004).

# Award Updates

- IEEE Innovation in Societal Infrastructure Award to Bill Sanders (2016)
- *"For the assessment-driven design of trustworthy cyber infrastructures for electric grid systems."*
- To be delivered at DSN 2016!

# Future Working Group Meetings



71 Queenstown, NZ — (winter 17)

72 Near Boulder, TBD — (summer 17)

73 ?? — (winter 18)

74 ?? — (summer 18)

# 70th Meeting (summer 2016)

**DONE !**

Location: Sorèze (near Toulouse)

Host: J. Arlat

Dates: **before (!)** DSN, 24-27 June 2016 (fri-mon)

Hotels: Abbaye Ecole de Sorèze, Hotel and SPA

Costs: ~ TBD /night hotel; ~ TBD reg.

## ▪ Hotel Includes

- Breakfast
- Several facilities
- WiFi

▪ Transfer to Toulouse on Monday 27 June

■ **Workshop** : Smart Factories

■ **Coord.**: Jean Arlat, Mohamed Kaaniche

# 71st Meeting (winter 2017)

**PROPOSAL  
APPROVED!**

- Location: Queenstown, New Zealand (it is **Summer** in NZ !)  
<http://www.queenstownnz.co.nz/>
- Host: Takashi Nanya (Univ. of Tokyo, JP), DongSeong Kim (University of Canterbury, NZ)
- Dates:
  - ◆ 26-30 Jan. 2017 in Queenstown After PRDC'17 in Christchurch
- Hotel: **Rydges Lakeland Resort Queenstown**
- Costs:
  - ◆ 220 NZD (approx. 155 USD) including GST/night hotel;
  - ◆ 525 NZD (approx. 360 USD) reg.
- Registration Includes:
  - Welcome Reception; Lunches and coffee breaks; Excursion; Banquet
  - Hotel Includes
    - Several facilities, WiFi
- Workshop : Workshop ideas TBD

**IT IS GOING TO BE HIGH SEASON,  
EARLY RESERVATIONS ADVISED**

# New Zealand Map



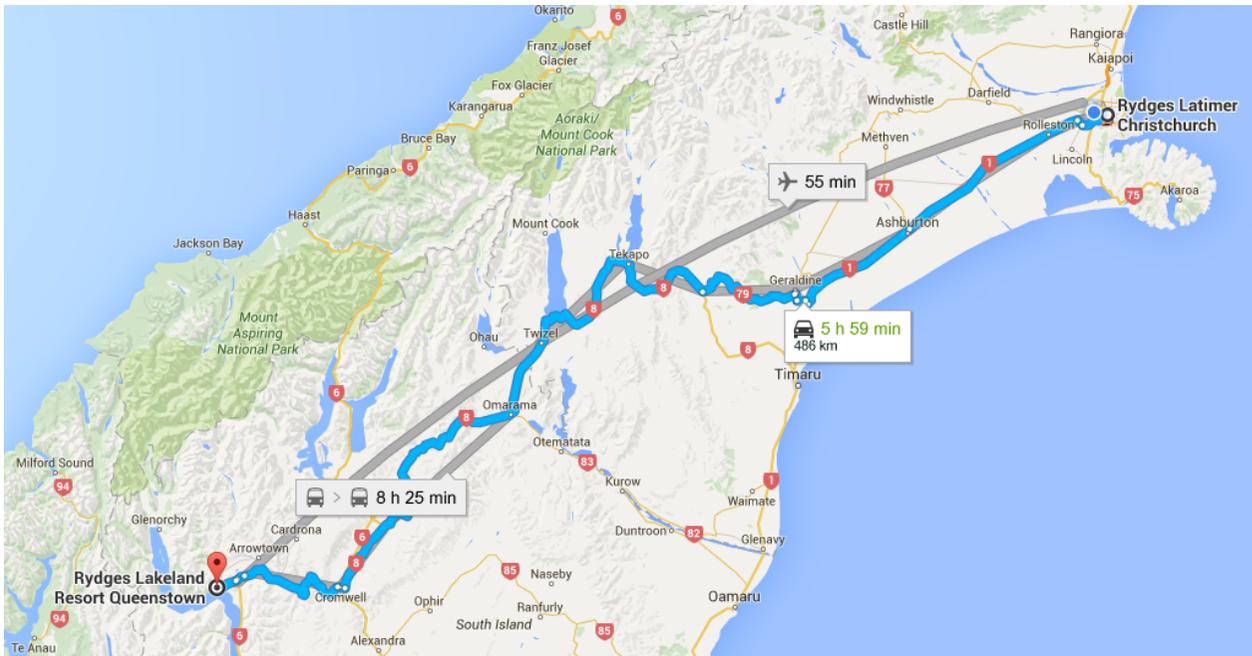
# Logistics

## ■ Fly as fast option

- ◆ International flights via Auckland, Christchurch (NZ), Sydney etc.
- ◆ non-stop flights (Air New Zealand/Jetstar) available, less than one hour flying time from Christchurch

## ■ Can drive: scenic! (one the way to Q-town)

- ◆ Lake Tekapo
- ◆ Lake Pukaki
- ◆ Cromwell



Lake Tekapo



Queenstown (Q-town)

# Workshop venue: Ryldges Lakeland Resort Queenstown

- is located on the shores of stunning Lake Wakatipu, boasting unmatched views across the water to some of the most majestic scenery in New Zealand.
- a five minute walk from the centre of this exciting town, and caters for visitors, sporting enthusiasts and conference groups.



# Excursion

- **Group excursion: Milford sound day trip (on 29 Jan 2017)**  
(departs around 7am and returns around 7:30pm)
  - ◆ You'll experience the world famous fiord - rich in dense rainforest, glacier carved valleys and beautiful waterfalls.
  - ◆ In Milford Sound, 2 hour scenic boat cruise and enjoy a lunch (picnic with meat option, vegetarian or sushi packed lunch option are available and must be pre-booked) served on board.
  - ◆ Plenty of stops are included for photo opportunities
    - ✦ Visit Mirror Lakes, Monkey Creek, Knobs Flat, Homer Tunnel, Christie Falls, The Chasm and Mitre Peak
  - ◆ Fly back option available (additional cost)



**Mirror lake**



**Monkey creek**



**Milford Cruise**

# 72nd Meeting (summer 2017)

**PROPOSALS  
WELCOME !**

Location: TBD, near Boulder, Colorado, US (DSN17)

Host: *A willing member, in colab with Shivakant!*

Dates: after DSN

Hotels: TBD

Costs: ~ TBD /night hotel; ~ TBD reg.

## ▪ Hotel Includes

- Breakfast
- Several facilities
- WiFi

**Workshop : Workshop ideas TBD**

# 73rd Meeting (winter 2018)

**PROPOSALS  
WELCOME !**

Location: TBD

Host: TBD

Dates: TBD

Hotels: TBD

Costs: ~ TBD /night hotel; ~ TBD reg.

▪ Hotel Includes

- Breakfast
- Several facilities
- WiFi

**Workshop : Workshop ideas TBD**

# 74th Meeting (summer 2018)

**PROPOSAL**  
will be tabled!

Location: **Petite Suisse?**, Luxembourg (DSN18)

Host: Paulo Veríssimo

Dates: after DSN

Hotels: TBD

Costs: ~ TBD /night hotel; ~ TBD reg.

## ▪ Hotel Includes

- Breakfast
- Several facilities
- WiFi

**Workshop : Workshop ideas TBD**

# 75th Meeting (winter 2019)

**PROPOSALS  
WELCOME !**

Location: TBD

Host: TBD

Dates: TBD

Hotels: TBD

Costs: ~ TBD /night hotel; ~ TBD reg.

▪ Hotel Includes

- Breakfast
- Several facilities
- WiFi

**Workshop : Workshop ideas TBD**

# Workshops outlook

- Winter 2014 (Sorrento-Italy)
  - ◆ Security Assessment: Metrics and Methods, DONE
- Summer 2014 (Amicalola Falls near-Atlanta-US)
  - ◆ Electrical Smart Grids Security and Dependability, DONE
- Winter 2015 (Tortworth-Bristol, UK)
  - ◆ Science of Cyber Security, DONE
- Summer 2015 (Búzios, Brazil)
  - ◆ Autonomous and Cooperative Intelligent Vehicles, DONE
- Winter 2016 (Snowmass, US))
  - ◆ Systems Dependability in the Internet of Things (IoT), DONE
- Summer 2016 (Sorèze, France)
  - ◆ Smart Factories: Challenges for Depend. and Sec. Computing, DONE
- Winter 2017 (TBD)
  - ◆ Tbd
- Summer 2017 (TBD)
  - ◆ Tbd

# Major Workshop Topics

distributed computing, parallel computing, real-time systems, certification of dependable systems, specification methods, design diversity, specification and validation of hard dependability requirements, methodologies for experiments, VLSI testing and fault tolerance, hardware- and-software testing and validation, fault tolerance in new architectures, communication networks, algorithms for distributed agreement, cars and computers, accidental vs. intentional faults, robotics and dependability, limits in dependability, avionics and dependability, dependability issues in medical computing, security and dependability, tools for dependable system design and evaluation, railway safety, safety cases, dependability in automotive electronics, computer systems benchmarking with applications to dependability, time and dependability, dependability, survivability, and integrity in e-commerce transactions and infrastructure, dependability benchmarking, utilization of formal methods in dependable systems, challenges and directions for dependable computing, dependability and survivability, middleware for adaptivity and dependability, measuring assurance in cyberspace + hardware design and dependability, open source and dependability, human computer interaction and dependability, autonomic web computing, grid computing and dependability, nomadic computing and dependability, infrastructure security and operational challenges of service provider networks, critical infrastructure protection, achieving and assessing safety, cps dependability, dependability in cloud systems, security assessment: metrics and methods, electrical smart grids sec&dep, science of cyber security, Autonomous and Cooperative Intelligent Vehicles, Systems Dependability in the Internet of Things (IoT), Smart Factories: Challenges for Depend. and Sec. Computing

# Dependability and Security R&D and R&D outlets: present and future

- We are in a crucial moment of the development of our community, and its major outlets, DSN figuring out as the flagship conference
- In the near future, it would be appropriate to foster some discussion about the topic in headline.

**Should close:**  
• Winter 2017  
• Summer 2017

# Workshop ideas

(FUTURE ideas circulated recently)

- Medical systems (assisted living, health informatics, applied biomedical engineering)
- Other focused topics on CPS (a property, a kind)
- Autonomous human-machine interaction, cooperative robots
- Socio-technical issues of security research and training (ethics, "ethical hacking", awareness)
- Economics of security and/or dependability
- Foundational research on Dep & Sec
- Scaling down to <10nm: dependability challenges and opportunities
- Present and future of Dep & Sec R&D and relevant outlets
- Reliability of big data
- Reliability of forensic processes
- Dependability of digital currencies / ledgers
- Use of machine learning for accidental and malicious error detection
- Liability and dependability

Members please consider organizing a workshop, even if not the next, it's good to have a few lined-up!  
You may do it with the assistance of non-member colleagues.  
Please contact me (PJV)