

# 59th IFIP WG 10.4 Meeting

Snowmass, Colorado, US

*January 12-16, 2011*



Thursday, January 13, 2011

# Agenda

- IEEE/IFIP DSNs -DSN-2011, DSN-2012 ...
- Future WG Meetings —60, 61 ...
- Members only portion

# IEEE/IFIP International Conference on Dependable Systems and Networks



## Hong Kong, China (2011)

- ◆ General Chair: **Michael Lyu** (Chinese University of Hong Kong, China)
- ◆ Conference Coordinator: **Sy-Yen Kuo** (National Taiwan University, Taiwan)
- ◆ DCCS Program Chair: **Saurabh Bagchi** (Purdue University, USA)
- ◆ PDS Program Chair: **Susanna Donatelli** (University of Torino, Italy)
- ◆ Submissions: 143 (DCCS) + 106 (PDS)



## Boston, MA, US (2012)

- ◆ General Chair: **Bob Swarz** (MITRE, US)
- ◆ DCCS Program Chair: **Phil Koopman** (CMU, US)
- ◆ PDS Program Chair: **Michael Cukier** (University of Maryland, US)

## Budapest, Hungary (2013)

- ◆ General Chair: **András Pataricza** (Technical Univ of Budapest, Hungary)

## ??? (2014)

- ◆ General Chair: **???**

## Rio de Janeiro, Brazil (2015)

- ◆ General Chair: **Eliane Martins** (State Univ of Campinas, Brazil)

**DSN'2011 in Hong Kong**

**Dates: June 27-30, 2011**

**Location: Sheraton Hotel and Towers  
Tsim Sha Tsui, Kowloon**





# Organizing Committee

- General Chair: Michael R. Lyu (Chinese Univ. of Hong Kong)
- DCCS Chair: Saurabh Bagchi (Purdue Univ., USA)
- PDS Chair: Susanna Donatelli (Univ. of Torino, Italy)
- Conf. Coordinator: Sy-Yen Kuo (National Taiwan Univ., Taiwan)
- Local Arrangements: Roy Ko (Hong Kong Productivity Council)
- Finance Chair: Irwin King (Chinese Univ. of Hong Kong)
- Fund-Raising: K.T. Yung (Hong Kong Productivity Council)

External Support: The Croucher Foundation, The HK Applied Science and Technology Research Institute, Huawei Technologies, IBM, and Microsoft Research

# Program Structure

- Day 1: Workshops + Tutorials
  - Full day workshops:
    - WRAITS: The 5th Workshop on Recent Advances on Intrusion-Tolerant Systems
    - WDSN: The 5th Workshop on Dependable and Secure Nanocomputing
    - DCDV: The 1st International Workshop on Dependability of Clouds, Data Centers and Virtual Computing Environments
    - HotDep: The 7th Workshop on Hot Topics in System Dependability
  - Half day workshops:
    - WDSMDS: International Workshop on Dependable and Secure Medical Devices and Systems
    - WOSD: The 1st International Workshop on Open Systems Dependability : Adaptation to a Changing World
    - PFARM: The 3rd Workshop on Proactive Failure Avoidance, Recovery, and Maintenance
    - ADAMUS: The 5th Workshop on Adaptive and DependAble Mobile Ubiquitous Systems
- Day 2-4: Main Program
  - Daily Lunch, 2 coffee breaks
  - Excursion + Banquet

# Conference Hotel

- Sheraton Hong Kong Hotel and Towers, located in Tsim Sha Tsui, southern tip of Kowloon



Sheraton Hong  
Kong



# Hotel Photos (1)



DSN 2011



# Hotel Photos (2)





# Hotel Photos (3)





See you @ DSN2011

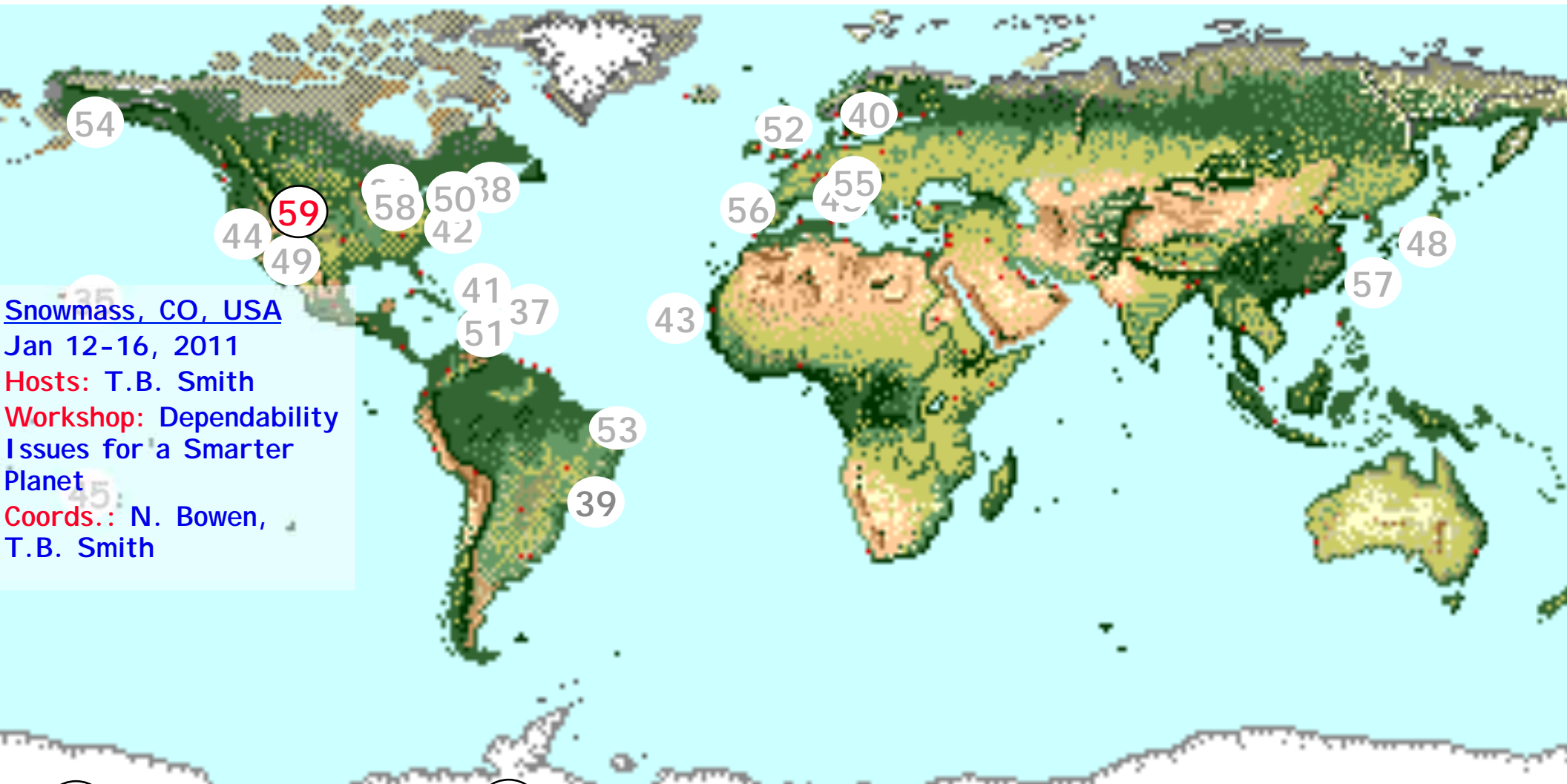
in Hong Kong!

June, 2011

DSN 2011



# Future Working Group Meetings



60 Taiwan (Summer 11)

61 St. Martin (?)  
(winter 12)

62 Rockport, MA, USA (summer 12)

63 ??? (winter 13)

# 60th Meeting (summer 2011)

- **Location:** Near Taipei, Taiwan
- **Host:** Sy-Yen Kuo (NTU) with help from Yennun Huang (Vee Telecom)
- **Hotel:** South Garden Hotel
  - ◆ Airport: 25 minutes, ~US\$30 taxi
  - ◆ Taipei: 35 minutes
  - ◆ Taiwan high speed rail Taoyuan Station: 8 minutes
- **Dates:**
  - ◆ Evening of July 1 (Friday) through lunchtime on July 4 (Monday)
  - ◆ One day later start to allow travel time after DSN ends on June 30 (Thurs)
- **Workshop: Hardware Issues in Dependable & Secure Computing** (Coords: Jean Arlat, Zbigniew Kalbarczyk, Takashi Nanya)



# **60th Meeting of the IFIP 10.4 Working Group**

Taoyuan, Taiwan

**July 1-4, 2011**

Sy-Yen Kuo  
National Taiwan University



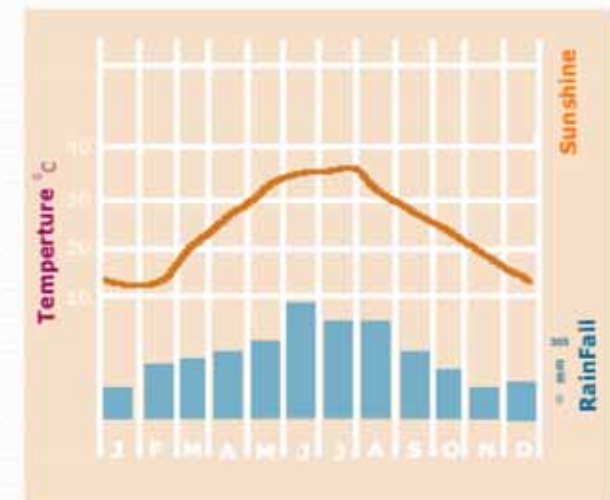


## Map of Taiwan Cities & Counties



# Introduction to Taiwan

- Area: 36,000 km<sup>2</sup>
- Population: 23 million
- Capital: Taipei City
- Language:  
Mandarin/Taiwanese/Hakka
- Religion: Buddhism/Taoism/  
Christian/  
Islam/Catholicism
- Climate:
  - Annual avg. temperature: 22 °C
  - Lowest temperatures: 12-17 °C





# Transportation

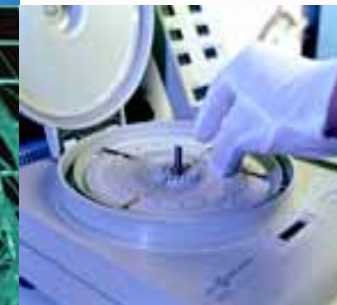
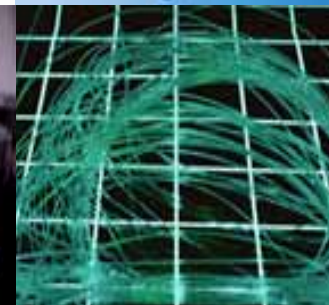
- Taipei and Hong Kong can be reached by many airlines.
- Many direct flights from US or Europe every day to either Taipei or Hong Kong
- Many flights (over 40 everyday) from Hong Kong to Taipei and the flight time is about 80 minutes.
- Taipei – airport to downtown
  - Bus: \$4
  - Taxi: \$40

# Visa

- No visa is required for the following countries to enter Taiwan: Australia, Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, \*Ireland, Italy, \*Japan, Republic of Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Malaysia, Malta, Monaco, the Netherlands, \*New Zealand, Norway, Poland, Portugal, Romania, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, \*U.K., U.S.A. and Vatican City State.

# Industry Development

- Hsinchu Science Park, Central Science Park and Southern Taiwan Science Park.
  - Business volume: 1357.5 billion
  - 620 manufacturers
  - 158,973 employees
- Fields:
  - Integrated Circuits
  - Computers and Peripherals
  - Precision Machinery
  - Telecommunication
  - Optoelectronics
  - Biotechnology





# SOUTH GARDEN



Approximate travel time from the hotel to various locations

(Landmark / Route / Time):

Taoyuan International Airport / Road 114, National Highway No. 1 / 25 min

ADD : No.8, SHUNIH RD.,  
JHONG LI CITY, TAOYUAN  
COUNTY, TAIWAN

[http://  
www.southgarden.com.tw/en/  
html/page-about.htm](http://www.southgarden.com.tw/en/html/page-about.htm)



# Conference Room





# Dining





# Dining

## The Garden Restaurant



## The South Restaurant

# Recreation

Hot Spring & Kurhaus Center · Recreation Center ...





# Guest Room

Deluxe Room (king-size bed)



Price	~\$150+10%tax
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# Guest Room

Deluxe Room (two twin beds)



Price

~\$150+10%tax

# Guest Room

## Deluxe Family Room



Price

~US\$180+10%tax

# Price

	SOUTH GARDEN
Room	king-size, two twin beds ~ US\$150+10%tax Superior Family Room: ~US\$160+10%tax Deluxe Family Room:~ US\$180+10%tax



# Tourist



- Taoyuan International Airport

25 min



- Taipei

35 min



- Cihu Mausoleum

35 min



45 min

- Land of Retreat & Wellness



- South Garden

35 min



- The Daxi Old Street

# Popular Tours

- Gourmet Guide
- Culture & Heritage
- Hot Springs
- Adventure
- Offshore Islands
- Ecotourism
- Rail Tour



Food: 彰化肉圓(冠群攝影)



Clothing: 刺繡(葉英晉)



Dwelling: 遠來飯店(蕭綱侯)



Traffic: 蒸氣火車(徐世榮)



Education: 集集明新書院  
(上允傳播)



Recreation: 東山河(林明仁)



# Tourist Spots: Delicious Foods

North Taiwan



Steamed Pork Bun (DinTaiFung)



Chilly & Spicy Hotpot (Taihodien)

Central Taiwan



Sun Cake (阿明師老店太陽堂)



Meat boll (Chang Hwa )



# Tourist Spots: Delicious Foods

South Taiwan



Wan-Luan Pork Knuckle



Guan-Tsai-Ban (Red Hill)



Kaoliang Liquor (Kinmen)

East Taiwan



Rice Food (Tzen)



Gong Tang Candy (Kinmen)

Offshore Islands



# Tourist Spots: Festivals



The Ghost Festival  
(徐善廣告)



Kaohsiung Lantern Festival  
(Chung-Kuang Lo)



Folk Performance  
(Rich Communication Services)



The Dragon Boat Festival  
(Rich Communication Services)



# Tourist Spots: Culture



Stage Makeup (Chu Li-Hwa)



Tao Boat Festival  
(Fu Guo-cai)



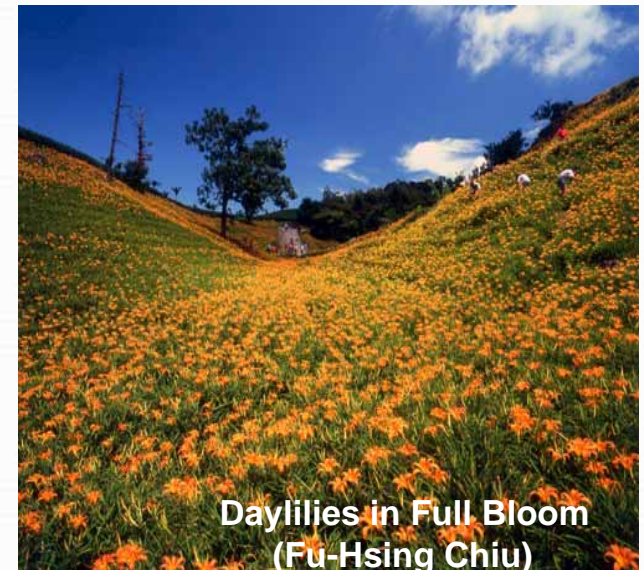
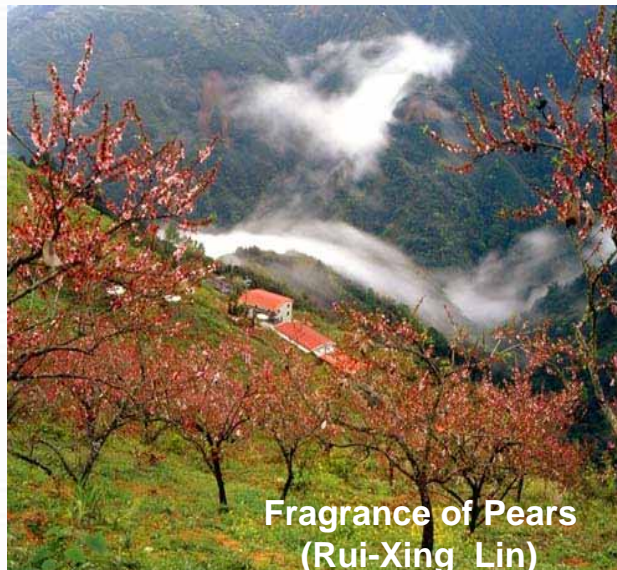
Amis Harvest Festival (Wu Zhi-xue)



Sung Chiang Battle Array  
(Sun-In AV Corporation)



# Tourist Spots: Scenic Area





# Tourist Spots: National Parks



Kenting National Park



Yushan National Park



Yangmingshan National Park



Taroko National Park



Shei-Pa National Park



Kinmen National Park



# Tourist Spots: Historic Spots



Confucius Temple (Sun-In AV Corporation)



Lungteng Bridge (Rich Communication Services)



Pao-an Temple (Sun-In AV Corporation)



The Beauty of Rails (Jia-Jung Chiou)

Provided by Ministry of Transportation, R.O.C. (Taiwan)



# Tourist Spots: Museums/Memorials



Chiang Kai-shek Memorial Hall (Sun-In AV Corporation)



Taipei Story House (Robert Siao)



The Railroad Museum (Sun-In AV Corporation)



National Palace Museum

Provided by Ministry of Transportation, R.O.C. (Taiwan)



# Tourist Spots: Buildings and Bridges



Grand-hotel



Taipei 101



Taipei World Trade Center



Lover Bridge

# Tourist Spots: Night Scenes



Taipei 101



Kaohsiung



Taipei Miramar



Lover Bridge



# Tourist Spots: Transportation



Taipei Metro

Taiwan High Speed Rail

Taiwan Railway



# Tourist Spots: Entertainments



Art



Shopping



Hot Spring



Playground



Ocean Park

# Workshop Proposal for WG10.4 2011 summer meeting in Taipei

January 13, 2011

IFIP WG10.4 Business Meeting

Snowmass Village, CO, USA



# Hardware Issues in Dependable & Secure Computing

- Workshop Organizers:
  - Jean Arlat (LAAS-CNRS), Zbigniew Kalbarczyk (UIUC), Takashi Nanya (Canon)
- Background:
  - Geographical location of the summer meeting in Taiwan provides a good opportunity to put forward hardware-related issues in dependable & secure computing where Asian countries are major players for years.
  - The WDSN workshop ([www.laas.fr/WDSN11](http://www.laas.fr/WDSN11)) to be held at DSN2011 in Hong Kong should help to consolidate the links already established with key people in the nanocomputing field.
  - The previous IFIP WG 10.4 Workshop focusing on Hardware Issues was organized in June 2003, i.e. 8 years ago.
    - "Hardware Design and Dependability"  
see <http://www.laas.fr/IFIPWG/Workshops&Meetings/44>

# Tentative set of topics to address

- **Hardware-related Fault Pathologies**
  - Manufacturing defects, aging and parameter variations
  - Single Event Effects (SEU, SET) and mitigation techniques
  - Vulnerability to deliberate (or malicious) VLSI design/operation faults
- **Hardware Architectures and Systems**
  - Novel and future architectures (FPGAs, many-cores, ...)
  - Routing and communication issues in NoCs
  - Hardware issues in embedded systems for critical applications
- **Assessment Methods and Techniques**
  - Trends in VLSI testing and verification techniques
  - Hardware-level dependability evaluation and benchmarking
- **Advanced Nanoscale Technologies (“Beyond Moore”)**
- ...



# Potential speakers (not contacted yet)

- **Hardware-related Fault Pathologies**
  - Shubu Mukherjee (Cavium Networks, USA)
  - Michel Renovell (LIRMM-CNRS, France)
  - Hans-Joachim Wunderlich (U.Stuttgart, Germany)
  - Takeshi Fujino (Ritsumeikan Univ., Japan)
- **Hardware Architectures and Systems**
  - Christos Kozyrakis (Stanford Univ., USA)
  - Hermann Kopetz (Vienna Univ. of Tech., Austria)
  - Tomohiro Yoneda (National Institute of Informatics, Japan)
- **Assessment Methods and Techniques**
  - Johan Karlsson (Chalmers Univ. Tech., Sweden)
  - Lisa Spainhower (IBM, USA)
  - Cheng-Wen Wu (Industrial Tech. Research Inst., Taiwan)
- **Advanced Nanoscale Technologies (“Beyond Moore”)**
  - Shekhar Borkar (Intel, USA)
  - Cristian Constantinescu (AMD, USA)
  - Subhasish Mitra (Stanford Univ., USA)

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  - Subhasish Mitra (Stanford Univ., USA)



# 61st Meeting (winter 2012)

- Location (tentative): St Martin/ Marteen, Caribbean
- Host: David Powell (LAAS-CNRS)
- Hotel: List of 4 possibilities; waiting for price estimates
- Dates: TBD, likely in the range Jan 12 to Feb 20
- Workshop: ?? Ideas/ Volunteers ??



# 62nd Meeting (summer 2012)

- Location: Rockport, Mass, US
- Dates: Thurs evening June 28 through noon Sun July 1 (after DSN in Boston)
- Venue: Shalin Liu Performance Center
- Host: Bob Swarz (MITRE)
- Hotel: Group of 3 or 4 small inns within walking distance
- Workshop: ?? Ideas/Volunteers ??

