

Welcome to the 2016 OMNeT++ Community Summit



September 15-16

Brno University of Technology – Czech Republic

About the Summit



- Main objectives
 - Facilitate interaction and sharing of experiences, models, and results among the OMNeT++ user and developer community
 - Facilitate interaction between OMNeT++ user community and the development team
- Third edition of the summit (following Hamburg 2014 and Zurich 2015)
- Six prior editions of the Int'l OMNeT++ Workshop (in conjunction with SIMUtools)
- Second two-day event!
- Densely-packed program including invited talks, panel, tutorials, regular presentations, demonstrations, Q&A sessions and hopefully a lot of interaction!
- First "Best Contribution Award" (details afterwards)

Summit Organizers (1)

- Founding Chair
 - András Varga (Simulcraft Inc.)
- Community Summit Organizers
 - Anna Förster (University of Bremen, Germany)
 - Vladimír Veselý (Brno University of Technology, Czech Republic)
- Technical Program Organizers
 - Antonio Virdis (University of Pisa, Italy)
 - Michael Kirsche (BTU Cottbus–Senftenberg, Germany)
- Publicity Organizer
 - Kyeong Soo (Joseph) Kim (Xi'an Jiaotong–Liverpool University, China)
 - Laura Marie Feeney (Uppsala University, Sweden)

















Summit Organizers (2)



- Technical Program Committee
 - Michael Frey (HU Berlin, Germany)
 - Yutaka Matsubara (Nagoya University, Japan)
 - Cyriel Minkenberg (Rockley Photonics Inc., USA)
 - Georg Panholzer (Salzburg Research, Austria)
 - Alfonso Ariza Quintana (University of Malaga, Spain)
 - Gabrielle Romaniello (Schneider Electric, France)
 - Christoph Sommer (University of Paderborn, Germany)
 - Dora Spenza (Sapienza University of Rome, Italy)
 - Mirko Stoffers (RWTH Aachen University, Germany)
 - Carlo Vallati (University of Pisa, Italy)

Local Logistics

Event takes place in Building C
 → Lecture Hall E105.

 Registration, coffee breaks and lunch will be held/served in the hall in front of E105

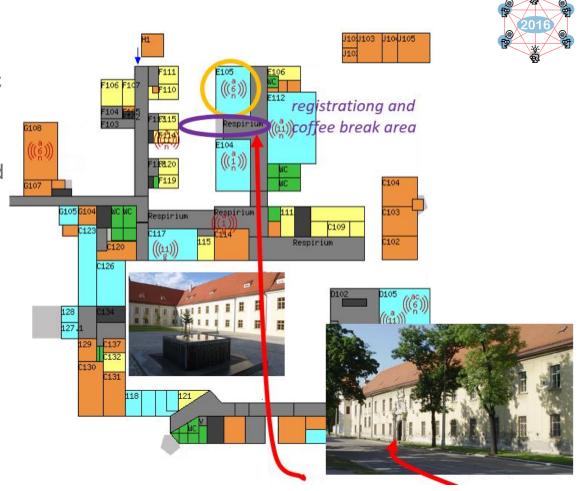
Dinner: details on next slide

WiFi access:

– SSID: VUTBR

– Username: omnetpp

– Password: starobrno



Community Dinner



- Restaurant PIVOVARSKÁ STAROBRNO
- Mendlovo náměstí 20, Brno (Located next to the Starobrno brewery)
- Buffet including vegetarian options
- Self-paid



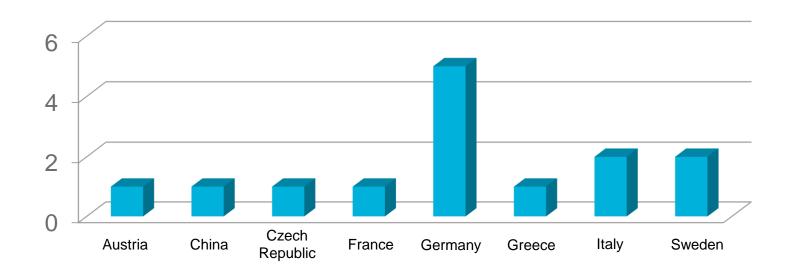




Contribution Statistics



- 14 submissions from 8 countries
 - 12 research submissions, from university
 - 1 Tutorial
 - 1 Panel



Review Process



- TPC with 10 members + organizers reviewed submissions to evaluate:
 - Novelty
 - Community value / interest
 - Technical content
- At least three reviews per submission
 - Valuable feedback for the authors for future publications
 - Conflicts and improvement possibilities addressed by reviewers
 - Presentation type advised
 - Shepherding

Best Contribution Selection



- Committee of selected attendees reviews each presentation (except invited ones)
 - → Committee members do not partake in the competition

Committee awards points to each presentation

TPC reviewer scores of submissions are included in the selection / voting

Best contribution is announced during the Summit Closure Note

Program (1)



- TPC selected:
 - 1 tutorials
 - 3 long presentations
 - 4 short presentations
 - 4 short presentations with demonstrations
 - 1 panel
- Proceedings are available at the <u>Summit website</u>
 - 1. Single PDF with all contributions collected
 - 2. Individual contributions linked in the program
- All presented contributions are published and indexed on <u>arXiv.org</u>

Program (2)



- Discussion Panel on Large-scale Simulation and Data Analysis
 - Thanks to Antonio Virdis
- Invited presentations and tutorials:
 - By OMNeT++ / OMNEST developers
 (thanks to András Varga, Rudolf Hornig, Levente Mészáros and Attila Török)
 - On novel research projects / frameworks
 (thanks to Vladimír Veselý and Marcel Marek)

Program (3)



NOTE: We have a very full program:

PLEASE STICK TO YOUR ALLOCATED TIME SLOTS

- Leave time for questions (recall the "interaction" objective)
- For presenters:
 - Session chairs are indicated on the program:
 - Please contact them in the break before your session
 - If possible, upload your presentation to the presentation laptop
 - Otherwise, please TEST your setup in the coffee break beforehand!

Thursday, Sep. 15th AM

Session	Time	Speaker / Title
Opening	08:30 - 09:00	Registration
	09:00 - 09:15	Welcome Note: Antonio Virdis, Michael Kirsche
Session: INET and OMNeT++ Developments Part 1 Session Chair: Kyeong Soo Kim	09:15 – 09:40	Felix Weinrank, Irene Rüngeler, Michael Tüxen and Erwin Rathgeb SCTP User Message Interleaving - Integration and Validation
	09:40 - 10:00	Atheer Al-Rubaye, Ariel Aguirre and Jochen Seitz Enabling Soft Vertical Handover for MIPv6 in OMNeT++
	10:00 – 10:25	Marco Tiloca, Alexandra Stagkopoulou and Gianluca Dini Performance and Security Evaluation of SDN Networks in OMNeT++/INET
	10:25 – 11:00	Laura Marie Feeney Towards a Better Battery Model for INET
Coffee Break	11:00 – 11:30	
Panel: Simulation and Data Analysis	11:30 – 12:15	Antonio Virdis, Carlo Vallati and Giovanni Nardini Automating Large-Scale Simulation and Data Analysis with OMNeT++: Lessons Learned and Future Perspectives
Lunch Break	12:15 – 13:15	

Thursday, Sep. 15th PM (1)

Session	Time	Speaker / Title
Session: INET and OMNeT++ Developments Part 2 Session Chair: Michael Kirsche	13:15 – 13:40	Syphax Iskounen, Thi Mai Trang Nguyen and Sebastien Monnet WiFi-Direct Simulation for INET in OMNeT++
	13:40 – 14:05	Invited Speaker: András Varga Plans for OMNeT++ 5.1
	14:05 – 14:30	Invited Speaker: Rudolf Hornig SQLite as a Result File Format for OMNeT++
Tutorial: SimuLTE	14:30 – 15:15	Giovanni Nardini, Antonio Virdis and Giovanni Stea Simulating Device-to-Device Communications in OMNeT++ with SimuLTE: Scenarios and Configurations
Coffee Break	15:15 – 15:45	

Thursday, Sep. 15th PM (2)

Session	Time	Speaker / Title
	15:45 – 16:10	Till Steinbach, Philipp Meyer, Stefan Buschmann and Franz Korf Extending OMNeT++ Towards a Platform for the Design of Future In-Vehicle Network Architectures
Session: OMNeT++ Extensions	16:10 – 16:35	Wolfgang Wallner Simulation of the IEEE 1588 Precision Time Protocol in OMNeT++
Session Chair: Vladimir Vesely	16:35 – 16:55	Kyeong Soo Kim Stacked-VLAN-Based Modeling of Hybrid ISP Traffic Control Schemes and Service Plans Exploiting Excess Bandwidth in Shared Access Networks
	16:55 – 17:15	Pavlos Maniotis, Nikos Terzenidis and Nikos Pleros The OptoHPC-sim simulator: Bringing OptoBoards to HPC-scale environments
Coffee Break	17:15 - 17:30	
Invited Session: Animation in OMNeT++ 5	17:30 – 18:30	Invited Speakers: Levente Mészáros, András Varga and Attila Török Enhancing Visualization and Animation in Simulation Models
Community Dinner	20:00 – open end	Meeting to walk together at 18:45

Friday, Sep. 16th AM

Session	Time	Speaker / Title
Session: Routing and Mobility Session Chair: Laura Marie Feeney	09:00 - 09:25	Benjamin Sliwa, Christoph Ide and Christian Wietfeld An OMNeT++ based Framework for Mobility-aware Routing in Mobile Robotic Networks
	09:25 – 09:50	Asanga Udugama, Behruz Khalilov, Anas Bin Muslim, Anna Förster and Koojana Kuladinithi Implementation of the SWIM Mobility Model in OMNeT++
	09:50 – 10:15	Vladimír Veselý, Vít Rek and Ondřej Ryšavý Babel Routing Protocol for OMNeT++: More than just a new Simulation Module for INET
Coffee Break	10:15 – 10:45	
Invited Session: Framework and Research Project Introduction	10:45 – 11:00	Invited Speaker: Vladimír Veselý Introducing OMNeT++-based Research Frameworks: ANSAINET
	11:00 – 11:15	Invited Speaker: Marcel Marek Introducing OMNeT++-based Research Frameworks: RINASim
Invited Session: Future Directions for INET	11:15 – 11:35	Invited Speaker: Rudolf Hornig An Update on the INET 3.x Developments
Session Chair: Antonio Virdis	11:35 – 12:20	Invited Speaker: Levente Mészáros An Update on the new INET IEEE 802.11 MAC Model
Closing Session	12:20 – 12:30	Summit Closure Note + "Best Contribution Award"

Best wishes from the organizers for an interesting and successful OMNeT++ Community Summit 2016