Welcome
to the
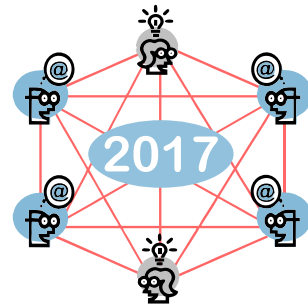# 2017 OMNeT++ Community Summit

September 7-8

University of Bremen – Germany

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

- Fourth edition of the summit (following Hamburg 2014, Zurich 2015, and Brno 2016)

- Six prior editions of the Int'l OMNeT++ Workshop (in conjunction with SIMUtools)

- Retained the two-day format!

- Densely-packed program including invited talks, tutorials, regular presentations, demonstrations, Q&A session, and hopefully a lot of interaction!

- "*Best Contribution Award*" (details afterwards)

Summit Organizers (1)

- Founding Chair
  - András Varga   (OpenSim Kft.)

- Community Summit Organizers
  - Anna Förster   (University of Bremen, Germany)
  - Asanga Udugama   (University of Bremen, Germany)
  - Andreas Könsgen   (University of Bremen, Germany)

- 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)
  - Vladimír Veselý   (Brno University of Technology, Czech Republic)
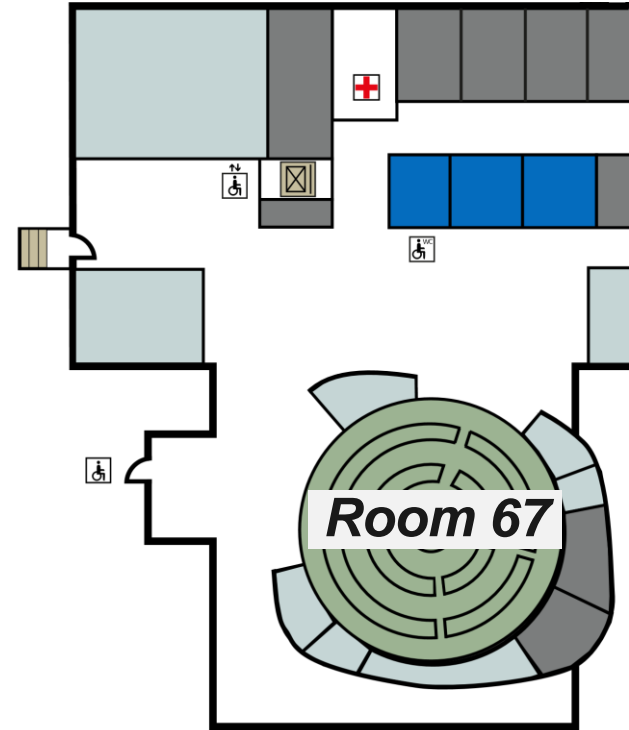
Summit Organizers (2)

- Technical Program Committee

  - Claudia Campolo   (University of Reggio Calabria, Italy)
  - Laura Marie Feeney   (Uppsala University, Sweden)
  - Michael Frey   (HU Berlin, Germany)
  - Florian Kauer   (TU Hamburg-Harburg, Germany)
  - Marcel Marek   (University of Oslo, Norway)
  - Yutaka Matsubara   (Nagoya University, Japan)
  - Cyriel Minkenberg   (Rockley Photonics Inc., USA)
  - Thi Mai Trang Nguyen   (UUPMC - LIP6, France)
  - Christoph Sommer   (University of Paderborn, Germany)
  - Mirko Stoffers   (RWTH Aachen University, Germany)
  - Marco Tiloca   (RISE SICS, Sweden)

Local Logistics

- Event takes place in Building "Cartesium (CART)"
  – Room 067 - Ground Floor

- Registration, coffee breaks and Friday lunch will be held / served right in front of Room 067

- Dinner: details on next slide

- WiFi access option 1:

  eduroam

- WiFi access option 2:
  – SSID: Uni-Bremen
  – Credentials per user, take a look at your WiFi pamphlet

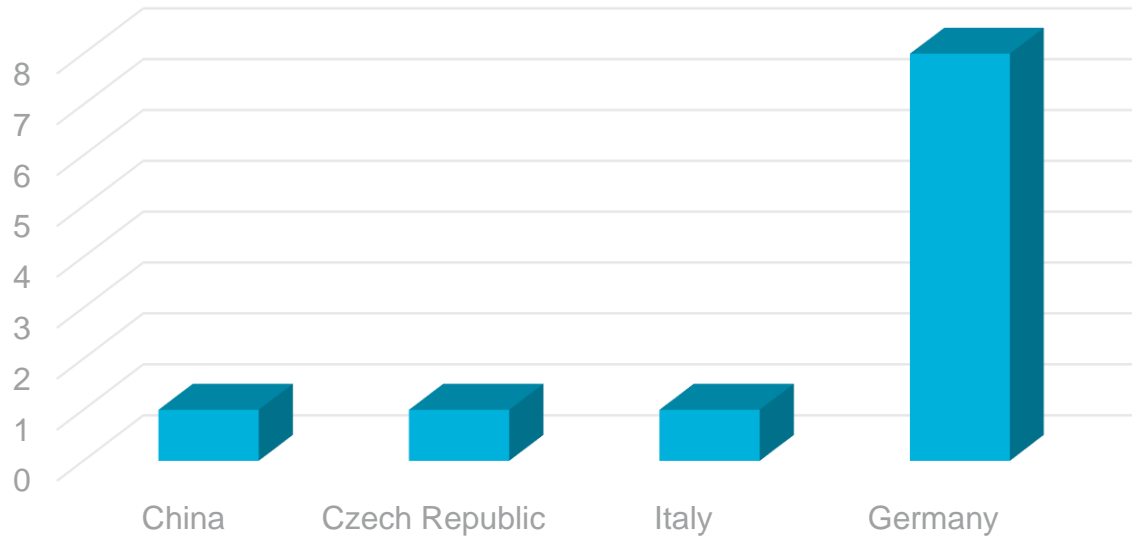Room 67

Social Event + Community Dinner

- Social Event @ **Bremer Ratskeller**,
  – Am Markt, 28195 Bremen

- Community Dinner @ **StadtWIRT Restaurant**,
  – Katharinenklosterhof 7, 28195 Bremen

- Self-paid

Contribution Statistics

- 11 submissions from 4 countries

- 2 tutorials

- 2 invited talks + 1 keynote

Keynote on Friday, 8th September 2017

- Reintroduced the keynote from the 2015 Summit in Zurich

- Topic: *The MASCOT Lander Onboard the Hayabusa2 Mission – Its Communication and Operations Strategy –*

- Speaker: *Dr. Tra-Mi Ho (System Engineering and Project Office, German Aerospace Center)*

  (Big thank you to Anna Förster for organizing the keynote)

Submission Review Process

- TPC with 11 members + organizers reviewed submissions to evaluate:
  - Novelty
  - Community value / interest
  - Technical content

- At least three (often four) reviews per submission
  - Valuable feedback for the authors for future publications / revisions
  - Conflicts and improvement possibilities addressed by reviewers
  - Presentation type advised
  - Shepherding (if deemed helpful)

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:
  - 4 long presentations
  - 2 long presentations with demonstrations
  - 3 short presentations
  - 2 short presentations with demonstrations

- Proceedings are available at the <u>Summit website</u>
  1. Single PDF with all contributions collected
  2. Individual contributions linked <u>in the program</u>

- All *presented* contributions are published and indexed on <u>arXiv.org</u>
  - Contact your TPC chairs in case of issues

Program (2)

- Invited presentations and tutorials:
    - By OMNeT++ / OMNEST developers
      (thanks to András Varga, Rudolf Hornig, and Levente Mészáros)
    - On reproducibility and simulation campaigns
      (thanks to Kyeong Soo (Joseph) Kim and Attila Török)

- Poster and Demo Session
    - During the Friday „lunch"

- Interactive Question & Answer Session with the OMNeT++ Core Development Team
    - Suggestions for discussion topics are welcome before and during the session

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 your session chair 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!

  – Copy your presentation (preferably as PDF) on the organizer's USB stick

Thursday, Sep. 07th AM

Session	Time	Speaker / Title
Opening	10:00 – 10:15	**Registration**
	10:15 – 10:30	**Welcome Note**: *Antonio Virdis, Michael Kirsche*
Session: Vehicular Network Simulation **Session Chair:** *Michael Kirsche*	10:30 – 11:00	*Benjamin Sliwa, Johannes Pillmann, Fabian Eckermann and Christian Wietfeld* LIMoSim: A Lightweight and Integrated Approach for Simulating Vehicular Mobility with OMNeT++
	11:00 – 11:30	*Christina Obermaier and Christian Facchi* Observations on OMNeT++ Real-Time Behaviour
	11:30 – 12:00	*Giovanni Nardini, Antonio Virdis and Giovanni Stea* Simulating Cellular Communications in Vehicular Networks: Making SimuLTE Interoperable with Veins
Lunch Break	12:00 – 13:15	
Session: New Models and Simulators **Session Chair:** *Kyeong Soo (Joseph) Kim*	13:15 – 13:35	*Behruz Khalilov, Anna Foerster and Asanga Udugama* Radio Irregularity Model in OMNeT++
	13:40 – 14:00	*Vladimir Vesely and Tomáš Rajca* Discovering Neighbor Devices in Computer Network: Development of CDP and LLDP Simulation Modules for OMNeT++
	14:00 – 14:30	*Asanga Udugama, Anna Foerster, Jens Dede, Vishnupriya Kuppusamy, Anas Bin Muslim* Opportunistic Networking Protocol Simulator for OMNeT++

Thursday, Sep. 07th PM

Session	Time	Speaker / Title
Tutorial: Reproducibility	14:30 – 15:00	*Kyeong Soo (Joseph) Kim* Reproducible Research for OMNeT++ Based on Python and Pweave
Coffee Break	15:00 – 15:30	
Tutorial: Simulation Campaigns	15:30 – 16:00	*Attila Török* Running Simulation Campaigns on a Docker Swarm
Session: Mobility Modeling **Session Chair:** *Antonio Virdis*	16:00 – 16:30	*Anna Förster, Anas Bin Muslim and Asanga Udugama* Reactive User Behavior and Mobility Models
	16:30 – 16:50	*Manikandan Venkateswaran, Zeynep Vatandas, Koojana Kuladinithi, Andreas Timm-Giel* Parameterization of SWIM Mobility Model Using Contact Traces
	16:55 – 17:15	*Liu Sang, Vishnupriya Kuppusamy, Anna Förster, Asanga Udugama and Ju Liu* Evaluating the Utility of UDG Using OMNeT++
Social Event *+* *Community Dinner*	17:15 – open end	

Friday, Sep. 08th AM

Session	Time	Speaker / Title
Keynote	09:00 – 09:45	*Dr. Tra-Mi Ho (German Aerospace Center - Institute of Space Systems)* The MASCOT Lander Onboard the Hayabusa2 Mission Its Communication and Operations Strategy
Coffee Break	09:45 – 10:15	
Session: OMNeT++ Developments **Session Chair:** *Michael Kirsche*	10:15 – 10:45	*Maximilian Köstler and Florian Kauer* A Remote Interface for Live Interaction with OMNeT++ Simulations
	10:45 – 11:05	*Henning Puttnies, Peter Danielis, Christian Koch and Dirk Timmermann* Java Extensions for OMNeT++
	11:05 – 11:45	*Invited Speaker: András Varga* OMNeT++ Best Practices Reloaded
Lunch Break	11:45 – 13:15	Poster and Demo Session
Session: INET Developments	13:15 – 13:45	*Invited Speaker: Levente Meszaros* INET 4 - Features and Porting
Q&A Session	13:45 – 14:15	*Interactive Question & Answer Session with the OMNeT++ Core Development Team*
Closing	14:15 – 14:30	**Summit Closure Note + "Best Contribution Award"**

Best wishes
from the organizers
for an interesting and successful
OMNeT++ Community Summit 2017