Welcome to ESEC/FSE 2017!

4 – 8 September 2017 · Paderborn · Germany







A warm welcome also from Wilhelm Schäfer!







Four fantastic keynotes!



Laurie Williams



Steve Easterbrook



Roy Fielding



Richard Taylor



Wolfgang Emmerich



An excellent program!

- 4 workshops + Doctoral Symposium
- 72 regular research papers
- 25 journal-first presentations
- 17 industry papers on Thursday and Friday
- 14 tool demos on Thursday
- Student Research Competition on Thursday & Friday
- SSBSE on Saturday and Sunday





Birds-of-a-Feather Sessions (BOFs)

- Self-organized, can still plan your own
 - See ESEC website: Program \rightarrow BOFs

- Current lineup:
 - Today 13:00-13:55
 How Do We Make Software Secure? Charles Weir
 - Today 17:45-19:00
 Rigorously Understanding Misunderstandings in Code - Justin Cappos



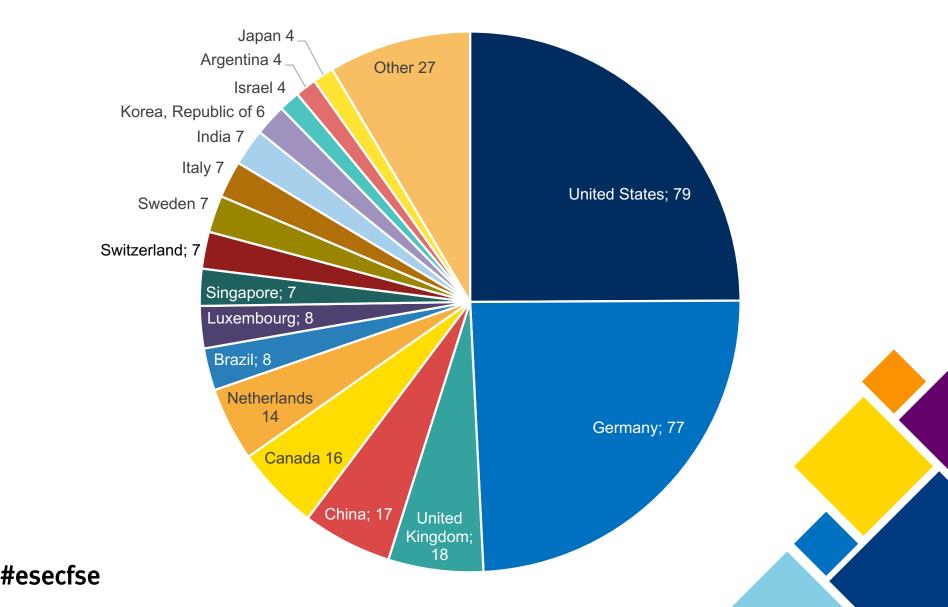
Experts from around the world!

- 317 attendees
- 293 during the main conference
- >30% students
- >8% industry





Experts from 33 countries around the world!



Logistics – Bus tickets for local transport

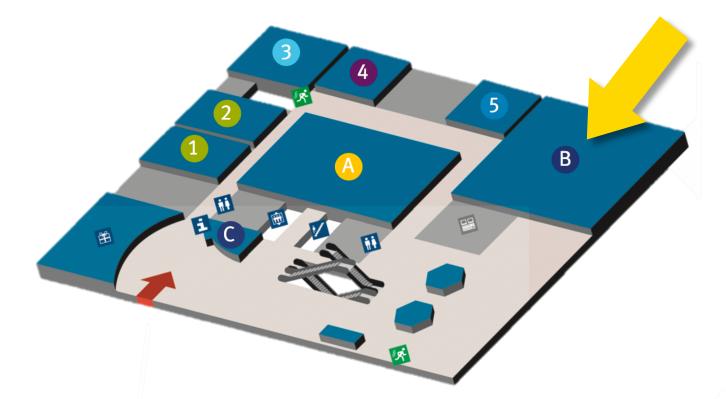
- You can obtain a bus ticket from registration desk free of charge!
- Valid for 4 rides
- Must invalidate/stamp ticket when entering the bus
- When not needed any more, please save us money by returning the ticket to our registration desk!



• Buses leave in front of this building at xx:06 and xx:36



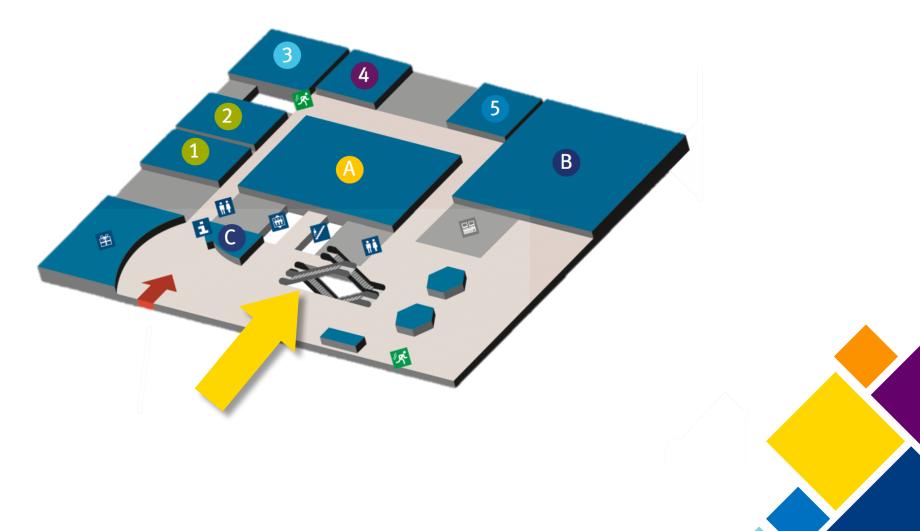
Logistics – Coffee Breaks / Lunches



• Also there: Student poster session tomorrow at lunchtime!



Logistics – Luggage storage downstairs





Logistics – Guided Museum Tours



- Sign up and meet at the registration area!
- Six tours in total. First tour: today at 12:50!
- Note: Badge gives you museum access any time!

Today: Welcome Reception & Guided City Tour

For city tours please also sign up at registration. Thanks!

Location: Historical Town Hall 18:30 – Start of Guided City Tours (1h) 19:30 – Start of Welcome Reception





Today: Welcome Reception & Guided City Tour

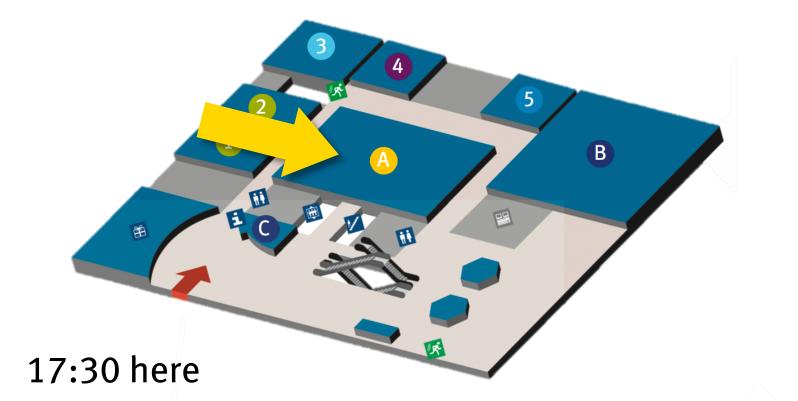


Location: Historical Town Hall 18:30 – Start of Guided City Tours (1h) 19:30 – Start of Welcome Reception





Tomorrow: SIGSOFT Townhall Meeting





Tomorrow: Banquet at "Hospitable Village"



- 18:30 Buses leave in front of conference venue; expect a 30min drive
- 22:00 Buses start returning to Paderborn
- 23:00 Last return bus leaving

Tomorrow: Banquet at "Hospitable Village"



Important: Bring your Banquet Ticket!





Thanks to our supporters!

Platinum:



Silver:



E&SCH

CHWARZ Cybersecurity Google



A true community effort...

- The ESEC/FSE organization committee
- The program committees of all FSE tracks ۲
- Thank you! The workshop organizers and their committees
- The student volunteers
- The external reviewers









Research Track





Research Track Papers

SUBMITTING COUNTRIES Africa Oceania South America 3% 1% 3% Canada 7% US 32% **Europe** 26% Asia 28% #esecfse

- 295 submitted papers

- 2 desk rejected

- 18 withdrawn



Process Overview

Double Blind Process

Lightweight in which author's identity was revealed to PC members during online discussion.

Review Phase

Each paper received three reviews from PC members. Each PC Member reviewed around 23 papers.

Rebuttal Period

Reviews were sent to authors for rebuttal.

Online Discussion

All papers were discussed online over a 15 days period Papers were marked as rejects, discussion, or early accepts

Program Committee Meeting

28 early accept papers were approved.

92 papers were discussed in depth - 34 accepted,

10 accepted conditionally, and the remainder rejected.



ESEC FSE 2017 – PC Meeting

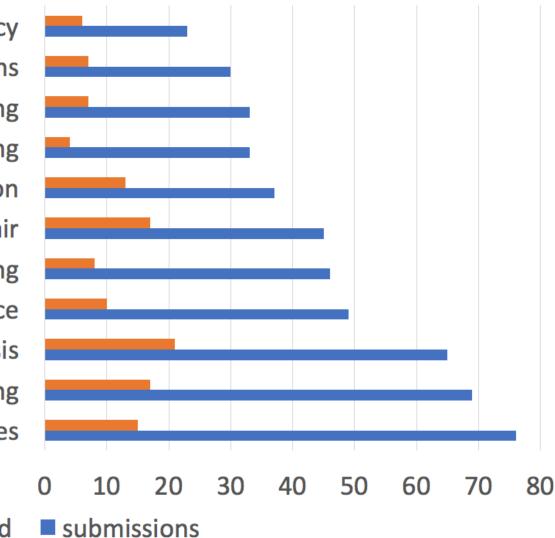


Buenos Aires, Argentina - 27th/28th May 2017

39 PC Members; Assistant: Moritz Beller



Most Popular Topics: Submitted & Accepted



Security and privacy Mobile applications Data analytics for software engineering Human aspects of software engineering Formal methods and verification Debugging, fault localization, and repair Software repository mining Software evolution and maintenance Program analysis Software testing **Empirical studies**



accepted

Artifacts Evaluated

- All 72 papers invited
- 13 submitted
- 11 badges granted:
 - 5 <u>reusable</u> artifacts
 - 6 <u>functional</u> artifacts
- Complete process in 3 weeks
- Separate committee of 17 people chaired by Bram Adams and Amel Bennnaceur
- https://github.com/researchart/fse17





Open Access

- Proceedings in ACM Digital library
 - Openly available during conference
 - Openly available as SIGSOFT OpenToc for one year
 - Authors can buy open access
 - Authors can self-archive ("green" open access) preprints
- Program contains links to preprints for ~75% of the papers
- Universities, funding agencies, GitHub demand open access





Journal First

- 25 "Journal First" Papers
 - IEEE Transactions on Software Engineering
 - Empirical Software Engineering Journal
 - ACM Transactions on Software Engineering and Methodology
- Not presented before at any conference
- Submitted after December 1, 2015
- Accepted before June 1, 2017
- Proposed by journal's editor-in-chief







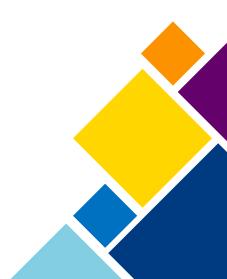
#esecfse

Presentations

- 24 Research Track sessions, mixing
 - 72 Research Papers
 - 25 Journal First Papers
- Sessions:
 - Attempt at coherent theme
 - 4 (or 3) papers per 90 minute session
 - 20 minutes per paper
 - Last 10 minutes: 1-on-1 discussions at poster



- SIGSOFT: 10% of papers eligible
- Reviewer nominations:
 - During reviewing
 - During on line discussion
 - During PC meeting
- 27 nominations for 21 papers
- Final selection of top 7 based on
 - PC nominations
 - PC discussion and paper scores





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The Power of "Why" and "Why Not": Enriching Scenario Exploration with Provenance

Tim Nelson, Natasha Danas, Daniel J. Dougherty, Shriram Krishnamurthy



Understanding Misunderstandings in Source Code

Dan Gopstein, Jake Iannacone, Yu Yan, Lois DeLong, Yanyan Zhuang, Martin K.C. Yeh, Justin Cappos



Trade-Offs in Continuous Integration: Assurance, Security, and Flexibility

Michael Hilton, Nicholas Nelson, Timothy Tunnell, Darko Marinov, Danny Dig



Cooperative Kernels: GPU Multitasking for Blocking Algorithms

Tyler Sorensen, Hugues Evrard, Alastair F. Donaldson



Fairness Testing: Testing Software for Discrimination

Sainyam Galhotra, Yuriy Brun, Alexandra Meliou



Discovering Relational Specifications

Calvin Smith, Gabriel Ferns, Aws Albarghouthi



Automatically Diagnosing and Repairing Error Handling Bugs in C

Yuchi Tian, Baishakhi Ray









THE RISING TIDE LIFTS ALL BOATS: THE ADVANCEMENT OF SCIENCE IN CYBER SECURITY

