

The background of the cover is a photograph of the Colosseum in Rome, Italy, taken from a low angle. The sky is a clear, deep blue. A white diagonal line runs from the bottom left towards the top right, separating the image from the white text area below.

<EURO/SYS'23>

**The 18th European Conference on
Computer Systems**

Rome, May 8th-12th, 2023

CONFERENCE MANUAL

The 18th European Conference on Computer Systems

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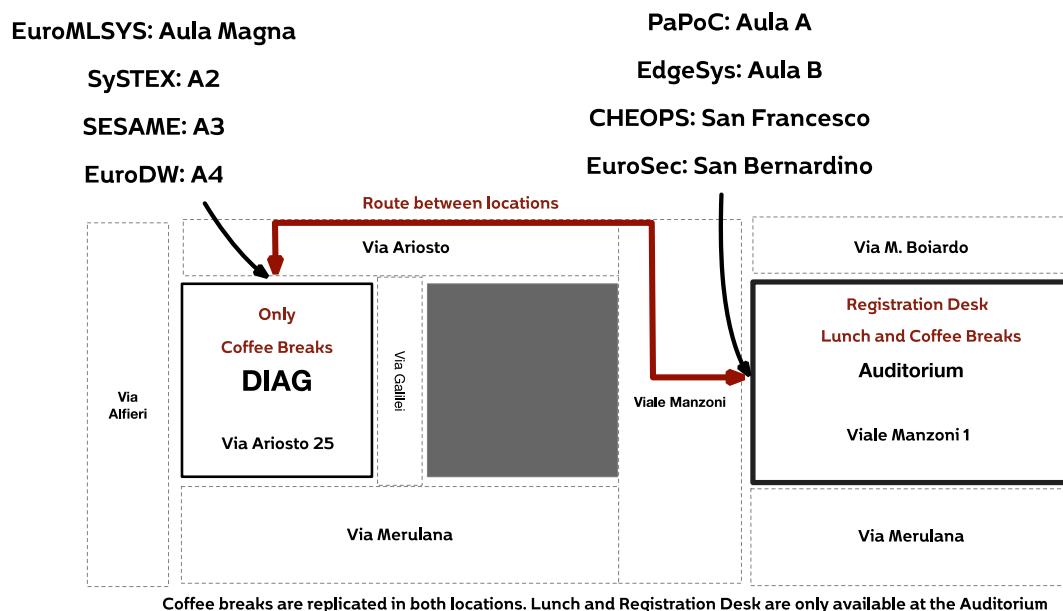


DAY 1 - WORKSHOPS

Workshops will take place on Monday 8th, May at [Auditorium Antonianum](#) (Viale Manzoni 1, 00185 Rome, Italy) and [DIAG](#) department (Via Ariosto 25, 00185 Rome, Italy).

REGISTRATION and **LUNCH** will take place **only at Auditorium Antonianum**.
Coffee breaks will take place both at **Auditorium Antonianum** and **DIAG**.

DIAG department is a 3-minute walk from **Auditorium Antonianum**. A walking route from **Auditorium Antonianum** to **DIAG** department can be found at the following [Google Maps](#).



Workshops will take place at the following rooms:

- **Auditorium Antonianum:** room A, room B, room "San Francesco", room "San Bernardino";
- **DIAG:** "Aula Magna", room A2, room A3, room A4.

The workshops co-organized with EuroSys 2023 are:

- 3rd Workshop on Challenges and Opportunities of Efficient and Performant Storage Systems ([CHEOPS](#));
- 6th International Workshop on Edge Systems, Analytics and Networking ([EdgeSys](#));
- 17th EuroSys Doctoral Workshop ([EuroDW](#));
- 3rd Workshop on Machine Learning and Systems ([EuroMLSys](#));
- 16th European Workshop on System Security ([EUROSEC](#));

- 10th Workshop on Principles and Practice of Consistency for Distributed Data ([PaPoC](#));
- 1st Workshop on SErverless Systems, Applications and MEthodologies ([SESAME](#));
- 6th Workshop on System Software for Trusted Execution ([SysTEX](#)).

Workshops' day will take place as follows:

- 8:30 – 9:00: **Registration**
- 9:00 – 10:30: **Workshops**
- 10:30 – 11:00: **Coffee Break**
- 11:00 – 13:00: **Workshops**
- 13:00 – 14:30: **Lunch**
- 14:30 – 16:00: **Workshops**
- 16:00 – 16:30: **Coffee Break**
- 16:30 – 18:00: **Workshops**

Workshops are located as follows:

Workshop	Location
PaPoC	Auditorium, first floor, Aula A
EdgeSys	Auditorium, first floor, Aula B
CHEOPS	Auditorium, ground floor, San Francesco
EuroSec	Auditorium, ground floor, San Bernardino
EuroMLSys	DIAG, first floor, Aula Magna
SysTEX	DIAG, ground floor, A2
SESAME	DIAG, ground floor, A3
EuroDW	DIAG, ground floor, A4

From **18:30** to **19:30** there will be a Welcome Reception at the "Chiostro" of the Sapienza Engineering Faculty. For further information on how to reach the location, see [How to reach the Welcome Reception](#).



DAY 2

This is the first day of the main conference and it will take place entirely at **Auditorium Antonianum**.

Tuesday 09/05/2023	
Begin-End	Subject
8:30-9:00	Registration
9:00-9:20	Opening Remarks
9:20-10:30	<p style="text-align: center;">Debugging 1 (Session Chair: Natacha Crooks)</p> <ul style="list-style-type: none">• Effective Performance Issue Diagnosis with Value-Assisted Cost Profiling <i>Lingmei Weng (Columbia University), Yigong Hu (Johns Hopkins University), Peng Huang (University of Michigan), Jason Nieh (Columbia University), Junfeng Yang (Columbia University)</i>• Foxhound: Server-Grade Observability for Network-Augmented Applications <i>Lucas Castanheira (Carnegie Mellon University), Alberto Schaeffer-Filho (Federal University of Rio Grande do Sul (UFRGS)), Theophilus A. Benson (Brown University)</i>• OFence: Pairing Barriers to Find Concurrency Bugs in the Linux Kernel <i>Baptiste Lepers (Université de Neuchâtel), Josselin Giet (ENS), Willy Zwaenepoel (The University of Sydney), Julia Lawall (Inria)</i>
10:30-11:00	Coffee Break
11:00-12:10	<p style="text-align: center;">Edge (Session Chair: Edouard Bugnion)</p> <ul style="list-style-type: none">• Pocket: ML Serving from the Edge <i>Misun Park (Georgia Institute of Technology), Ketan Bhardwaj (Georgia Institute of Technology), Ada Gavrilovska (Georgia Institute of Technology)</i>• Efficient and Safe I/O Operations for Intermittent Systems <i>Eren Yildiz (Ege University), Saad Ahmed (Georgia Institute of Technology), Bashima Islam (Worcester Polytechnic Institute), Josiah Hester (Georgia Institute of Technology), Kasim Sinan Yildirim (University of Trento)</i>



Tuesday 09/05/2023

	<ul style="list-style-type: none">• ICE: Collaborating Memory and Process Management for User Experience on Resource-limited Mobile Devices <i>Changlong Li (East China Normal University), Yu Liang (City University of Hong Kong), Rachata Ausavarungrun (King Mongkut's University of Technology North Bangkok), Zongwei Zhu (University of Science and Technology of China), Liang Shi (East China Normal University), Chuan Jason Xue (City University of Hong Kong)</i>
12:10-13:20	<p style="text-align: center;">Debugging 2 (Session Chair: Baptiste Lepers)</p> <ul style="list-style-type: none">• Diagnosing Kernel Concurrency Failures with AITIA <i>Dae R. Jeong (KAIST), Minkyu Jung (KAIST), Yoochan Lee (Seoul National University), Byoungyoung Lee (Seoul National University), Insik Shin (KAIST), Youngjin Kwon (KAIST)</i>• WAFFLE: Exposing Memory Ordering Bugs Efficiently with Active Delay Injection <i>Bogdan Alexandru Stoica (University of Chicago), Shan Lu (University of Chicago), Madanlal Musuvathi (Microsoft Research), Suman Nath (Microsoft Research)</i>• Model Checking Guided Testing for Distributed Systems <i>Dong Wang (Institute of Software Chinese Academy of Sciences), Wensheng Dou (Institute of Software Chinese Academy of Sciences), Yu Gao (Institute of Software Chinese Academy of Sciences), Chenao Wu (Institute of Software Chinese Academy of Sciences), Jun Wei (Institute of Software Chinese Academy of Sciences), Tao Huang (Institute of Software Chinese Academy of Sciences)</i>
13:20-14:50	Lunch
14:50-16:00	<p style="text-align: center;">Graph (Session Chair: Peter Pietzuch)</p> <ul style="list-style-type: none">• MariusGNN: Resource-Efficient Out-of-Core Training of Graph Neural Networks <i>Roger Waleffe (University of Wisconsin-Madison), Jason Mohoney (University of Wisconsin-Madison), Theodoros Rekatsinas (ETH Zurich), Shivaram Venkataraman (University of Wisconsin-Madison)</i>• Accelerating Graph Mining Systems with Subgraph Morphing <i>Kasra Jamshidi (Simon Fraser University), Harry Xu (UCLA), Keval Vora (Simon Fraser University)</i>• TEA: A General-Purpose Temporal Graph Random Walk Engine <i>Chengying Huan (Tsinghua University and Baihai Technology Inc.), Shuaiwen Leon Song (University of Sydney), Santosh Pandey</i>



Tuesday 09/05/2023

	<i>(Stevens Institute of Technology), Hang Liu (Stevens Institute of Technology), Yongchao Liu (Ant Group), Baptiste Lepers (Université de Neuchâtel), Changhua He (Ant Group), Kang Chen (Tsinghua University), Jinlei Jiang (Tsinghua University), Yongwei Wu (Tsinghua University)</i>
16:00-16:30	Coffee Break
16:30-16:50	Sponsored Talk
16:50-18:20	<u>Poster session</u>



DAY 3

Wednesday 10/05/2023	
Begin-End	Subject
8:30-9:00	Registration
9:00-10:30	<p style="text-align: center;">Machine Learning 1 (Session Chair: Y. Charlie Hu)</p> <ul style="list-style-type: none"> • ALT: Breaking the Wall between Data Layout and Loop Optimizations for Deep Learning Compilation <i>Zhiying Xu (Nanjing University), Jiafan Xu (Nanjing University), Hongding Peng (Nanjing University), Wei Wang (Nanjing University), Xiaoliang Wang (Nanjing University), Haoran Wan (Nanjing University), Haipeng Dai (Nanjing University), Yixu Xu (Huawei Technologies), Hao Cheng (Huawei Technologies), Kun Wang (University of California, Los Angeles), Guihai Chen (Nanjing University)</i> • REFL: Resource-Efficient Federated Learning <i>Ahmed M. Abdelmoniem (Queen Mary University of London), Atal Narayan Sahu (KAUST), Marco Canini (KAUST), Suhaib A. Fahmy (KAUST)</i> • Tabi: An Efficient Multi-Level Inference System for Large Language Models <i>Yiding Wang (Hong Kong University of Science and Technology), Kai Chen (Hong Kong University of Science and Technology), Haisheng Tan (University of Science and Technology of China), Kun Guo (Fuzhou University)</i> • Fast and Efficient Model Serving Using Multi-GPUs with Direct-Host-Access <i>Jinwoo Jeong (Ajou University), Seungsu Baek (Ajou University), Jeongseob Ahn (Ajou University)</i>
10:30-11:00	Coffee Break
11:00-12:10	<p style="text-align: center;">Memory (Session Chair: Sam H Noh)</p> <ul style="list-style-type: none"> • DiLOS: Do Not Trade Compatibility for Performance in Memory Disaggregation <i>Wonsup Yoon (KAIST), Jisu Ok (KAIST), Jinyoung Oh (KAIST), Sue Moon (KAIST), Youngjin Kwon (KAIST)</i>



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	<ul style="list-style-type: none">• vTMM: Tiered Memory Management for Virtual Machines <i>Sai Sha (Peking University), Chuandong Li (Peking University), Yingwei Luo (Peking University), Xiaolin Wang (Peking University), Zhenlin Wang (Michigan Technological University)</i>• Making Dynamic Page Coalescing Effective on Virtualized Clouds <i>Weiwei Jia (The University of Rhode Island), Jiyuan Zhang (New Jersey Institute of Technology), Jianchen Shan (Hofstra University), Xiaoning Ding (New Jersey Institute of Technology)</i>
12:10-13:20	<p style="text-align: center;">Misc 1 (Session Chair: Pedro Fonseca)</p> <ul style="list-style-type: none">• Omni-Paxos: Breaking the Barriers of Partial Connectivity <i>Harald Ng (KTH Royal Institute of Technology), Seif Haridi (KTH Royal Institute of Technology, RISE Research Institutes of Sweden), Paris Carbone (KTH Royal Institute of Technology, RISE Research Institutes of Sweden)</i>• CFS: Scaling Metadata Service for Distributed File System via Pruned Scope of Critical Sections <i>Yiduo Wang (University of Science and Technology of China; Baidu (China) Co., Ltd), Yufei Wu (University of Science and Technology of China), Cheng Li (University of Science and Technology of China, Anhui Province Key Laboratory of High Performance Computing), Pengfei Zheng (Baidu (China) Co., Ltd), Biao Cao (Baidu (China) Co., Ltd), Yan Sun (Baidu (China) Co., Ltd), Fei Zhou (Baidu (China) Co., Ltd), Yinlong Xu (University of Science and Technology of China; Anhui Province Key Laboratory of High Performance Computing), Yao Wang (Baidu (China) Co., Ltd), Guangjun Xie (Baidu (China) Co., Ltd)</i>• OLPart: Online Learning based Resource Partitioning for Colocating Multiple Latency-Critical Jobs on Commodity Computers <i>Ruobing Chen (Nankai university), Haosen Shi (Nankai university, NTU), Yusen Li (Nankai university, NTU), Xiaoguang Liu (Nankai University), Gang Wang (Nankai University)</i>
13:20-14:50	Lunch
14:50-16:00	<p style="text-align: center;">Serverless (Session Chair: Ana Klimovic)</p> <ul style="list-style-type: none">• Palette Load Balancing: Locality Hints for Serverless Functions <i>Mania Abdi (Northeastern University), Samuel Ginzburg (Princeton), Xiayue Charles Lin (Anyscale), Jose Faleiro (Unaffiliated), Gohar Irfan Chaudhry (Azure Systems Research), Inigo Gori (Azure Systems Research), Ricardo Bianchini (Azure Systems Research), Daniel S.</i>



Wednesday 10/05/2023

Berger (Azure Systems Research), Rodrigo Fonseca (Azure Systems Research)

- With Great Freedom Comes Great Opportunity: Rethinking Resource Allocation for Serverless Functions
Muhammad Bilal (Instituto Superior Técnico (ULisboa), INESC-ID, UCLouvain), Marco Canini (KAUST), Rodrigo Fonseca (Azure Systems Research), Rodrigo Rodrigues (Instituto Superior Técnico (ULisboa), INESC-ID)
- Groundhog: Efficient Request Isolation in FaaS
Mohamed Alzayat (Max Planck Institute for Software Systems (MPI-SWS)), Jonathan Mace (Max Planck Institute for Software Systems (MPI-SWS)), Peter Druschel (Max Planck Institute for Software Systems (MPI-SWS)), Deepak Garg (Max Planck Institute for Software Systems (MPI-SWS))

16:00-16:30

Coffee Break

Cloud Computing (Session Chair: Xiaosong Ma)

16:30-18:00

- Aggregate VM: Why Reduce or Evict VM's Resources When You Can Borrow Them From Other Nodes?
Ho-Ren Chuang (Virginia Tech), Karim Manaouil (The University of Edinburgh), Tong Xing (The University of Edinburgh), Antonio Barbalace (The University of Edinburgh), Pierre Olivier (The University of Manchester), Balvansh Heerekar (Virginia Tech), Binoy Ravindran (Virginia Tech)
- Understanding and Optimizing Workloads for Unified Resource Management in Large Cloud Platforms
Chengzhi Lu (Shenzhen Institute of Advanced Technology, CAS, University of Macau), Huanle Xu (University of Macau, Macau SAR), Kejiang Ye (Shenzhen Institute of Advanced Technology, CAS), Guoyao Xu (Alibaba Group), Liping Zhang (Alibaba Group), Guodong Yang (Alibaba Group), ChengZhong Xu (University of Macau, Macau SAR)
- Fail through the Cracks: Cross-System Interaction Failures in Modern Cloud Systems
Lilia Tang (University of Illinois Urbana-Champaign), Chaitanya Bhandari (University of Illinois Urbana-Champaign), Yongle Zhang (Purdue University), Anna Karanika (University of Illinois Urbana-Champaign), Shuyang Ji (University of Illinois Urbana-Champaign), Indranil Gupta (University of Illinois Urbana-Champaign), Tianyin Xu (University of Illinois Urbana-Champaign)
- LogGrep: Fast and Cheap Cloud Log Storage by Exploiting both Static and Runtime Patterns



Wednesday 10/05/2023

Junyu Wei (Tsinghua University), Guangyan Zhang (Tsinghua University), Junchao Chen (Tsinghua University), Yang Wang (The Ohio State University), Weimin Zheng (Tsinghua University), Tingtao Sun (Alibaba Group), Jiesheng Wu (Alibaba Group), Jiangwei Jiang (Alibaba Group)

18:00-19:00

General Assembly



DAY 4

Thursday 11/05/2023	
Begin-End	Subject
8:30-9:00	Registration
9:00-10:30	<p style="text-align: center;">Security (Session Chair: Rüdiger Kapitza)</p> <ul style="list-style-type: none"> • R2C: AOCR-Resilient Diversity with Reactive and Reflective Camouflage <i>Felix Berlakovich (μCSRL, Research Institute CODE, University of the Bundeswehr Munich), Stefan Brunthaler (μCSRL, Research Institute CODE, University of the Bundeswehr Munich)</i> • Safe and Practical GPU Computation in TrustZone <i>Heejin Park (Apple), Felix Lin (University of Virginia)</i> • Dissecting BFT Consensus: In Trusted Components we Trust! <i>Suyash Gupta (UC Berkeley), Sajjad Rahnama (University of California, Davis), Shubham Pandey (University of California, Davis), Natacha Crooks (UC Berkeley), Mohammad Sadoghi (University of California, Davis)</i> • Diablo: A Benchmark Suite for Blockchains <i>Vincent Gramoli (University of Sydney), Rachid Guerraoui (EPFL), Andrei Lebedev (University of Sydney), Chris Natoli (University of Sydney), Gauthier Voron (EPFL)</i>
10:30-11:00	Coffee Break
11:00-12:10	<p style="text-align: center;">Misc 2 (Session Chair: Reto Achermann)</p> <ul style="list-style-type: none"> • FrozenHot Cache: Rethinking Cache Management for Modern Hardware <i>Ziyue Qiu (University of Science and Technology of China, Microsoft Research, Carnegie Mellon University), Juncheng Yang (Carnegie Mellon University), Juncheng Zhang (University of Science and Technology of China), Cheng Li (University of Science and Technology of China, Anhui Province Key Laboratory of High Performance Computing), Xiaosong Ma (Qatar Computing Research Institute, HBKU), Qi Chen (Microsoft Research), Mao Yang (Microsoft Research), Yinlong Xu (University of Science and Technology of China, Anhui Province Key Laboratory of High Performance Computing)</i>



Thursday 11/05/2023

	<ul style="list-style-type: none">• Nephele: Extending Virtualization Environments for Cloning Unikernel-based VMs <i>Costin Lupu (University POLITEHNICA of Bucharest), Andrei Albişoru (University POLITEHNICA of Bucharest), Radu Nichita (University POLITEHNICA of Bucharest), Doru-Florin Blânzeanu (University POLITEHNICA of Bucharest), Mihai Pogonaru (University POLITEHNICA of Bucharest), Răzvan Deaconescu (University POLITEHNICA of Bucharest), Costin Raiciu (University POLITEHNICA of Bucharest)</i>• Unikernel Linux (UKL) <i>Ali Raza (Boston University), Thomas Unger (Boston University), Matthew Boyd (MIT CSAIL), Eric B. Munson (Boston University), Parul Sohal (Boston University), Ulrich Drepper (Red Hat), Richard Jones (Red Hat), Daniel Bristot de Oliveira (Red Hat), Larry Woodman (Red Hat), Renato Mancuso (Boston University), Jonathan Appavoo (Boston University), Orran Krieger (Boston University)</i>
12:10-13:20	<p style="text-align: center;">Networking (Session Chair: Marios Kogias)</p> <ul style="list-style-type: none">• FlexPass: A Case for Flexible Credit-based Transport for Datacenter Networks <i>Hwijoon Lim (KAIST), Jaehong Kim (KAIST), Inho Cho (MIT CSAIL), Keon Jang (MPI-SWS, Rubrik), Wei Bai (Microsoft Research), Dongsu Han (KAIST)</i>• Saba: Rethinking Datacenter Network Allocation from Application's Perspective <i>M.R. Siavash Katebzadeh (University of Edinburgh), Paolo Costa (Microsoft Research), Boris Grot (University of Edinburgh)</i>• A2TP: Aggregator-aware In-network Aggregation for Multi-tenant Learning <i>Zhaoyi Li (School of Computer Science and Engineering, Central South University), Jiawei Huang (School of Computer Science and Engineering, Central South University), Yijun Li (School of Computer Science and Engineering, Central South University), Aikun Xu (School of Computer Science and Engineering, Central South University), Shengwen Zhou (School of Computer Science and Engineering, Central South University), Jingling Liu (School of Computer Science and Engineering, Central South University), Jianxin Wang (School of Computer Science and Engineering, Central South University)</i>
13:20-14:50	Lunch
14:50-16:00	Transactions (Session Chair: Marc Shapiro)



Thursday 11/05/2023

	<ul style="list-style-type: none">• Viper: A Fast Snapshot Isolation Checker <i>Jian Zhang (Northeastern University), Ye Ji (Cockroach Labs), Shuai Mu (Stony Brook University), Cheng Tan (Northeastern University)</i>• Integrating Non-Volatile Main Memory in a Deterministic Database <i>Yu Chen Wang (University of Toronto), Angela Demke Brown (University of Toronto), Ashvin Goel (University of Toronto)</i>• Morty: Scaling Concurrency Control with Re-Execution <i>Matthew Burke (Cornell University), Florian Suri-Payer (Cornell University), Jeffrey Helt (Princeton University), Lorenzo Alvisi (Cornell University), Natacha Crooks (UC Berkeley)</i>
16:00-16:30	Coffee Break
16:30-18:00	<p style="text-align: center;">Persistence (Session Chair: Valerio Schiavoni)</p> <ul style="list-style-type: none">• RIO: Order-Preserving and CPU-Efficient Remote Storage Access <i>Xiaoqian Liao (Tsinghua University), Zhe Yang (Tsinghua University), Jiwu Shu (Tsinghua University)</i>• Chipmunk: Investigating Crash-Consistency in Persistent-Memory File Systems <i>Hayley LeBlanc (University of Texas at Austin), Shankara Pailoor (University of Texas at Austin), Om Saran K. R. E. (University of Texas at Austin), Isil Dillig (University of Texas at Austin), James Bornholt (University of Texas at Austin), Vijay Chidambaram (University of Texas at Austin, VMware Research)</i>• Mumak: efficient and black-box bug detection for Persistent Memory <i>João Gonçalves (Instituto Superior Técnico (ULisboa), INESC-ID), Miguel Matos (Instituto Superior Técnico (ULisboa), INESC-ID), Rodrigo Rodrigues (Instituto Superior Técnico (ULisboa), INESC-ID)</i>• NearPM: A Near-Data Processing System for Storage-Class Applications <i>Yasas Seneviratne (University of Virginia), Korakit Seemakhupt (University of Virginia), Sihang Liu (University of Waterloo), Samira Khan (University of Virginia)</i>
20:00-	Banquet (Chioistro del Bramante)



From **20:00** onwards there will be a Banquet at the “Chiostro del Bramante”. For further information on how to reach the location, see [How to reach the Banquet location](#).



DAY 5

Friday 12/05/2023	
Begin-End	Subject
9:00-10:30	<p style="text-align: center;">Key-Value Stores (Session Chair: Angela Demke Brown)</p> <ul style="list-style-type: none"> FlowKV: A Semantic-Aware Store for Large-Scale State Management of Stream Processing Engines <i>Gyewon Lee (FriendlyAI), Jaewoo Maeng (Seoul National University), Jinsol Park (Seoul National University), Jangho Seo (NAVER Corp.), Haeyoon Cho (Qualcomm), Youngseok Yang (Mirny Inc.), Taegeon Um (Samsung Research), Jongsung Lee (Samsung Electronics, Seoul National University), Jae W. Lee (Seoul National University), Byung-Gon Chun (FriendlyAI, Seoul National University)</i> All-Flash Array Key-Value Cache for Large Objects <i>Jinhyung Koo (DGIST), Jinwook Bae (DGIST), Minjeong Yuk (DGIST), Seonggyun Oh (DGIST), Jungwoo Kim (DGIST), Jung-Soo Park (WineSOFT), Eunji Lee (Soongsil University), Bryan S. Kim (Syracuse University), Sungjin Lee (DGIST)</i> DyTIS: A Dynamic Dataset Targeted Index Structure Simultaneously Efficient for Search, Insert, and Scan <i>Jin Yang (UNIST), Heejin Yoon (UNIST), Gyeongchan Yun (UNIST), Sam H. Noh (Virginia Tech), Young-ri Choi (UNIST)</i> DRAMHiT: A Hash Table Architected for the Speed of DRAM <i>Vikram Narayanan (University of Utah), David Detweiler (University of California, Irvine), Tianjiao Huang (University of California, Irvine), Anton Burtsev (University of Utah)</i>
10:30-11:00	Coffee Break
11:00-12:30	<p style="text-align: center;">Machine Learning 2 (Session Chair: Thaleia Doudali)</p> <ul style="list-style-type: none"> Lyra: Elastic Scheduling for Deep Learning Clusters <i>Jiamin Li (City University of Hong Kong), Hong Xu (The Chinese University of Hong Kong), Yibo Zhu (Google), Zherui Liu (ByteDance Inc.), Chuanxiong Guo (Unaffiliated), Cong Wang (City University of Hong Kong)</i> Egeria: Efficient DNN Training with Knowledge-Guided Layer Freezing <i>Yiding Wang (Hong Kong University of Science and Technology), Decang Sun (Hong Kong University of Science and Technology), Kai</i>



Friday 12/05/2023

Chen (Hong Kong University of Science and Technology), Fan Lai (University of Michigan), Mosharaf Chowdhury (University of Michigan)

- Hi-Speed DNN Training with Espresso: Unleashing the Full Potential of Gradient Compression with Near-Optimal Usage Strategies

Zhuang Wang (Rice University), Haibin Lin (ByteDance Inc.), Yibo Zhu (ByteDance Inc.), T. S. Eugene Ng (Rice University)

- SiloD: A Co-design of Caching and Scheduling for Deep Learning Clusters

Hanyu Zhao (Peking University), Zhenhua Han (Microsoft Research), Zhi Yang (Peking University), Quanlu Zhang (Microsoft Research), Mingxia Li (USTC), Fan Yang (Microsoft Research), Qianxi Zhang (Microsoft Research), Binyang Li (Microsoft), Yuqing Yang (Microsoft Research), Lili Qiu (Microsoft Research), Lintao Zhang (BaseBit Technologies), Lidong Zhou (Microsoft Research)

12:30-12:50

Closing Session



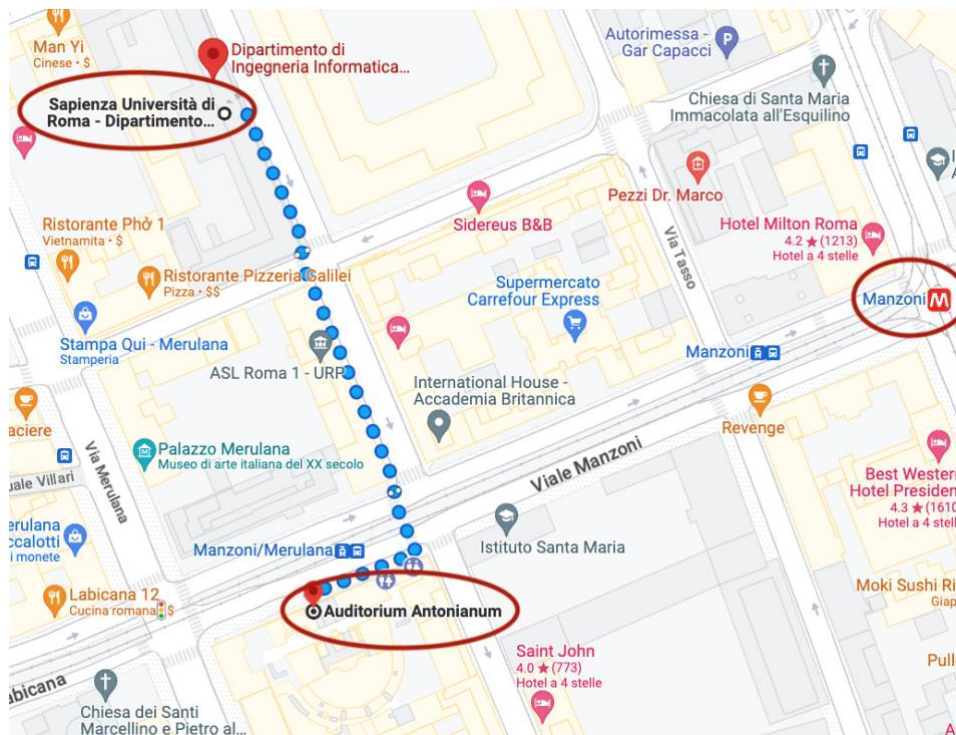
VENUE

How to reach the Conference area

DIAG and Auditorium Antonianum are situated in a very well-connected area of Rome, within one hundred meters from the underground station **Manzoni – Museo della Liberazione (line A)**. The easiest way to reach the EuroSys 2023 conference area is by underground.

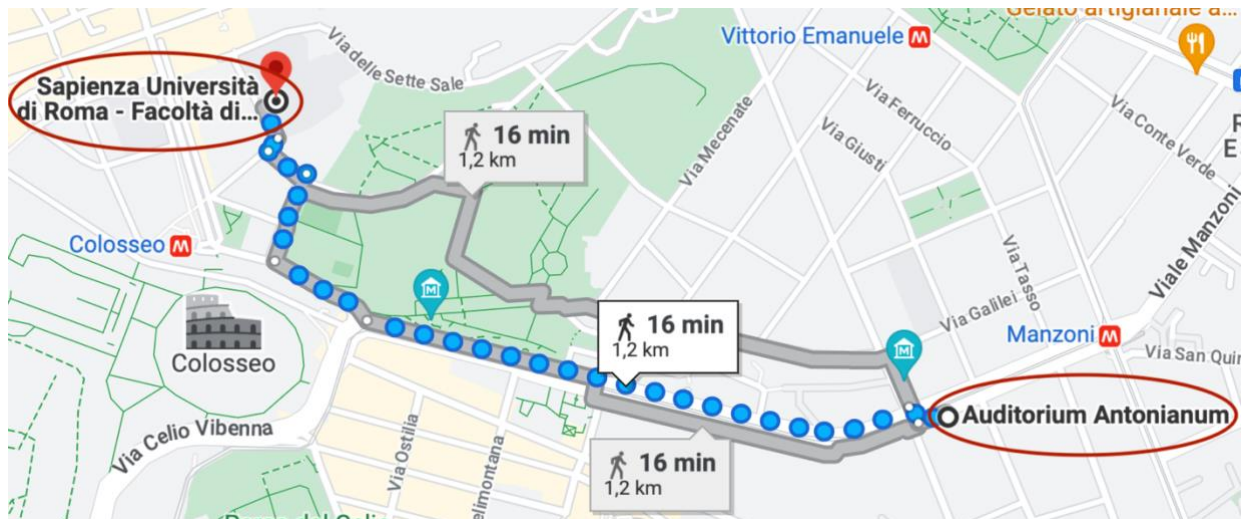
Rome is served by an underground, which has three lines, line A (orange), line B (blue) and line C (green). Lines A and B cross at the main railway station, Termini while Lines A and C cross at San Giovanni station. The underground is open from 5:30 until 23:30 every day, except for Friday and Saturday night, when the last train departs at 01:30. Underground Line A from Sunday to Thursday closes at 21:00 (from 21:00 until 23:30 the service will be replaced by bus).

A map of the underground can be downloaded from [this link](#). Tickets can be purchased at the vending machines, at newspaper stands inside the stations, by app or SMS, or directly with your credit, debit or prepaid card using the [tap&go®](#) service. From Termini station, take line A (the orange one) in the direction Anagnina. Get off at Manzoni (after two stops). To reach the Auditorium Antonianum (main conference venue) at Viale Manzoni 1, follow Viale Manzoni until the intersection with Via Merulana. To reach DIAG (satellite events venue) follow Viale Manzoni until the intersection with Via Ludovico Ariosto, then turn right until number 25.



How to reach the Welcome Reception

The Welcome Reception will be held on the 8th of May, starting at 18:30, at the "Chiostro in San Pietro in Vincoli" of the Sapienza Engineering Faculty (Address: Via Eudossiana, 18, 00184 Roma RM, Italy). The "Chiostro" is a 16-minute walk from **Auditorium Antonianum** and **DIAG** department (a walking route from **DIAG** can be found at the following [Google Maps](#)). During the path, you will go through the "Parco del Colle Oppio e delle terme di Traiano", where the famous "Domus Aurea" is located.



Just a stone's throw away from "Chiostro", is the renowned [San Pietro in Vincoli Basilica](#), which closes at 19:00. This Basilica houses the marvelous Mosè sculpture by Michelangelo, an incredible masterpiece that should not be missed by the attendees of the conference.

How to reach the Banquet location

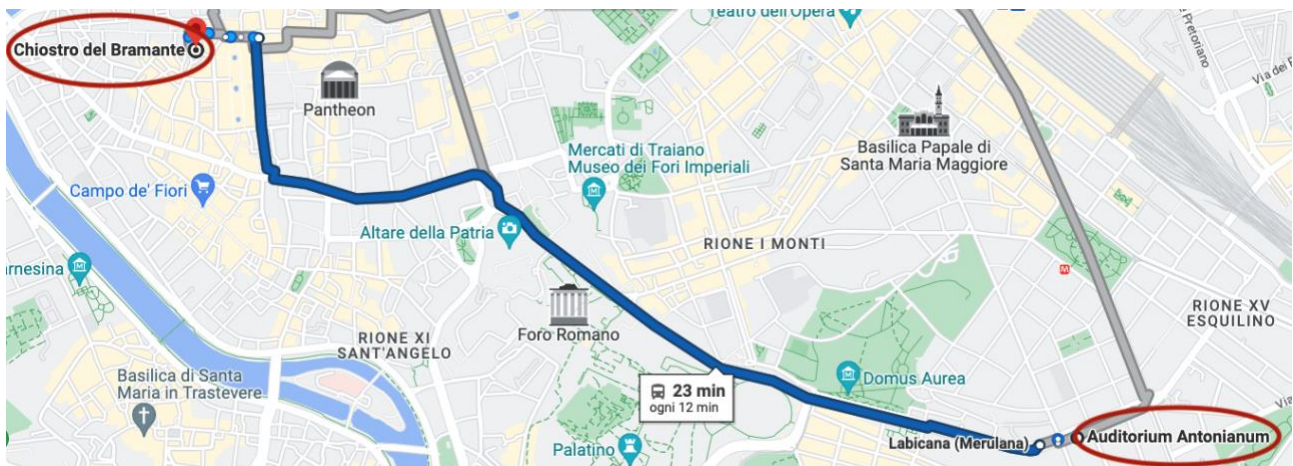
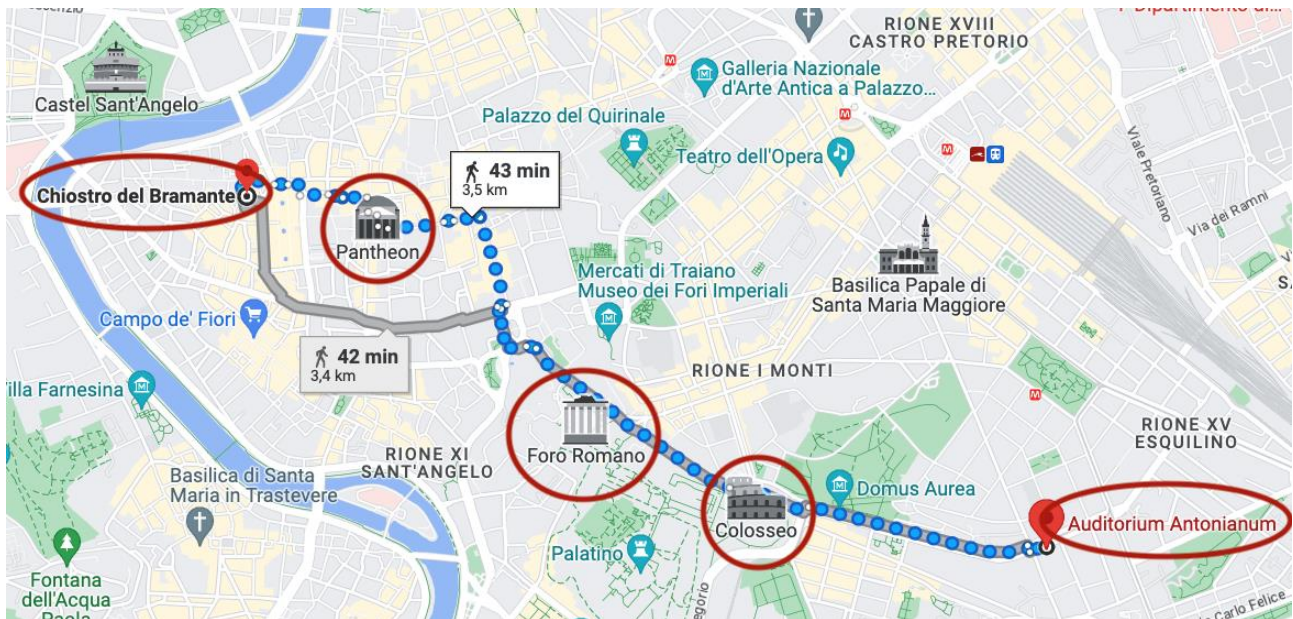
At the end of the day (from 20:00 onwards) there will be a banquet located at the "[Chiostro del Bramante](#)" (Address: Arco della Pace, 5, 00186 Roma RM, Italy). The Chiostro del Bramante, a jewel of Italian Renaissance architecture, is located in the heart of Rome. Commissioned by Cardinal Oliviero Carafa in the late 15th century, was designed by the renowned architect Donato Bramante.

By walking, it takes 43 minutes to travel from **Auditorium Antonianum** to **Chiostro del Bramante**. The path passes by notable landmarks such as the Colosseum, Piazza Venezia, and the Pantheon. If you'd like to visit the Trevi Fountain, you can take a 15-minute detour after Piazza Venezia. A suggested walking route (without the detour) can be found at the following [Google Maps](#).

It is also possible to take the metro at Manzoni and travel to the Spagna stop. From Spagna, it is an 18-minute walk to the banquet venue.



Alternatively, you can take bus 87 from the bus stop in front of the conference venue in the direction of Giulio Cesare/Lepanto (Ma), getting off at the Senato stop. From there, it's a 3-minute walk to Chiostro del Bramante (see [Google Maps link](#)).



How to reach Rome

Rome is served by two airports: Leonardo Da Vinci Airport (also known as Fiumicino Airport) and G. B. Pastine Airport (also known as Ciampino Airport).

Arriving at Fiumicino Airport

Leonardo Da Vinci is the main Italian hub and it has direct flights to more than 200 destinations, including all the European capitals and major European cities, major cities of the US, Canada, Brazil, Mexico, Japan, Middle-east and Asia.

Take the train "Leonardo Express" (see [here](#) for further information) that has a direct connection to Rome Termini Station (Rome main railways station). Here, you can take the underground Line A (direction Anagnina), and exit to Manzoni station and then walk



for some meters to reach Auditorium (approximately 45 min). The train schedule is frequent, and the entire trip takes around 30 minutes, tickets can be bought near the train departure site at the airport. Leonardo Da Vinci Airport is connected to Rome also by frequent busses.

Arriving at Ciampino Airport

G. B. Pastine Airport is a smaller airport used mainly by low cost companies, it has connections to many European cities. Terravision shuttle bus from Ciampino Airport to Rome Termini Station (Rome main railways station) where you can take the underground Line A (direction Anagnina), exit to Manzoni station and then walk for some meters (the time depends on the traffic, because Rome is a city with a lot of traffic, but approximately 60 min).

Taxi

The official cabs of the City of Rome are white, with the word "TAXI" on the roof and the symbol of the City of Rome and the license number clearly visible on the doors. You will find cabs both at Terminal 1 and Terminal 3 arrivals at Fiumicino Airport.

From Fiumicino airport to Rome Center, i.e., inside the Aurelian Walls (including Rome Termini station), and back there is a fixed cost rate of € 50,00.

If you intend to reach Fiumicino airport by cab from Rome, know that all trips departing from inside the Grande Raccordo Anulare, cannot and will never exceed the amount of € 73,00.

From Ciampino airport to Rome Center, i.e., inside the Aurelian Walls (including Rome Termini station), and back there is a fixed cost rate of € 31,00.



Food Places

The following list of food places is just a suggestion of nearby places for food.
Eurosys 2023 has no partnership with any of these.

- **Vecchia Roma (typical roman food)**

Via Ferruccio 12/b/c 00185 Rome
8 minutes (800 m) of walking from Auditorium Antonianum
<https://www.trattoriavecchiaroma.it/>

- **Baia Chia (sea food restaurant)**

Via Machiavelli 5A 00185 Rome
4 minutes (400 m) of walking from Auditorium Antonianum
<https://www.ristorantebaiachia.it/>

- **Trattoria Da Danilo (typical roman food)**

Via Petrarca 13 00185 Rome
6 minutes (450 m) of walking from Auditorium Antonianum
<https://www.trattoriadadanilo.com/>

- **Gelateria Fassi (ice cream shop)**

Via Principe Eugenio 65-67 00185 Rome
9 minutes (700 m) of walking from Auditorium Antonianum
<https://www.gelateriafassi.com/>

- **Pasticceria Regoli (typical sweet pastry shop)**

Via dello Statuto 60 00185 Rome
<http://www.pasticceriaegoli.com/>
11 minutes (800 m) of walking from Auditorium Antonianum

- **Mercato Centrale (gourmet food court with many options including vegan)**

Via Giovanni Giolitti 36 00185 Rome
<https://www.mercatocentrale.com/rome/>
17 minutes (1300 m) of walking from Auditorium Antonianum



WI-FI connection

Auditorium Antonianum

You can connect to the network "auditorium antonianum" using the password "Eurosyst2023".

DIAG

If your institution participates in the Eduroam roaming program, you can connect to the Eduroam Wi-Fi network. Eduroam is a secure wireless network. It has been developed for the education and research community and it is used by millions of users from thousands of universities in more than 70 countries worldwide. You can find useful information at this [link](#).

