

Zestawienie konferencji USENIX, część z nich jest dopiero w planach, użyteczne są też linki do poprzednich konferencji. warto na nią zaglądać co jakiś czas.

<https://www.usenix.org/conferences>

Od Andrzeja Jackowskiego

1. The Fungible DPU A New Category of Microprocessor
 2. Usenix Fast'19 --> Scale check
 3. <https://www.usenix.org/conference/srecon22emea/presentation/janardhan>
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2023

- 1.
 - 2.
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2022

1. LinuxCon@OSS EU
https://www.youtube.com/playlist?list=PLbzoR-pLrL6r3opG-M3bShM_ZMUaqReae
2. Linux Plumbers Conference
https://www.youtube.com/playlist?list=PLVsQ_xZBEyN0a9XC70HTwTFR-TsUtSGBY

<https://lpc.events/event/16/timetable/#all.detailed>

<https://lpc.events/event/16/timetable/#all>

YouTube: <https://www.youtube.com/c/LinuxPlumbersConference>, np.

- ~~Spawning processes faster and easier with io_uring~~, Josh Triplett, Linux Plumbers Conference 2022
https://www.phoronix.com/news/Linux-LPC2022-io_uring_spawn
Introducing io_uring spawn
<https://lwn.net/Articles/908268/>
- ~~OS Scheduling with Nest: Keeping Tasks Close Together on Warm Cores.~~
<https://lpc.events/event/16/contributions/1198/attachments/983/1909/plumbers.pdf>
<https://hal.inria.fr/hal-03612592/file/paper.pdf>
- Make RCU do less (& later),
<https://lpc.events/event/16/contributions/1204/attachments/985/1937/Make%20RCU%20do%20less%20%28and%20later%29%21%20%281%29.pdf>
<https://lpc.events/event/16/contributions/1204/attachments/985/2006/Make%20RCU%20do%20less%20%28and%20later%29%21%20%282%29.pdf>
<https://lpc.events/event/16/contributions/1204/attachments/985/2008/Make%20RCU%20do%20less%20%28and%20later%29%21%20%283%29.pdf>

3. 20th USENIX Conference on File and Storage Technologies, FAST'22

<https://www.usenix.org/conference/fast22/technical-sessions>, np.

- ctFS: Replacing File Indexing with Hardware Memory Translation through Contiguous File Allocation for Persistent Memory
<https://www.usenix.org/conference/fast22/presentation/li>
- Improving the Reliability of Next Generation SSDs using WOM-v Codes,
<https://www.usenix.org/conference/fast22/presentation/jaffer> (best paper)

- Operational Characteristics of SSDs in Enterprise Storage Systems: A Large-Scale Field Study
<https://www.usenix.org/conference/fast22/presentation/maneas>
4. **SYSTOR 2022, The 15th ACM International System and Storage Conference**
<https://www.systor.org/2022/accepted-papers/#1650796603778-f20f35a4-5cbe>, np.
 - Diego Didona - Understanding Modern Storage APIs: A systematic study of libaio, SPDK, and io_uring, <https://www.youtube.com/watch?v=5jKKVdJJqKY>
 5. **19th USENIX Symposium on Network Systems Design and Implementation**
<https://www.usenix.org/conference/nsdi22/technical-sessions>, np.
 - Efficient Scheduling Policies for Microsecond Scale Tasks, <https://www.usenix.org/conference/nsdi22/presentation/mcclure>
 - Learning to Communicate Effectively Between Battery-free Devices, <https://www.usenix.org/conference/nsdi22/presentation/geissdoerfer>
 6. **EuroSys 2022**
<https://2022.eurosys.org/programme/>,
<https://dl.acm.org/doi/proceedings/10.1145/3492321> (Proceedings), np.
 - Hardening Binaries against More Memory Errors, <https://dl.acm.org/doi/pdf/10.1145/3492321.3519580>
 - Characterizing the performance of intel optane persistent memory: a close look at its on-DIMM buffering, <https://dl.acm.org/doi/pdf/10.1145/3492321.3519556>
 - KASLR in the age of MicroVMs
 7. **16th USENIX Symposium on Operating Systems Design and Implementation, 2022**,
http://0b4af6cdc2f0c5998459-c0245c5c937c5dedcca3f1764ecc9b2f.r43.cf2.rackcdn.com/osdi22/osdi22_full_proceedings.pdf, np.
 - TriCache: A User-Transparent Block Cache Enabling High-Performance Out-of-Core Processing with In-Memory Programs, str. 395
 - Tiger: Disk-Adaptive Redundancy Without Placement Restrictions, str. 413
 - zIO: Accelerating IO-Intensive Applications with Transparent Zero-Copy IO, str. 431
 - Application-Informed Kernel Synchronization Primitives, str. 667
 8. **Dla osób zainteresowanych tematem bezpieczeństwa**
Artykuły przyjęte na konferencję 31st USENIX Security '22 Summer
<https://www.usenix.org/conference/usenixsecurity22/summer-accepted-papers>
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2021

9. **Linux Plumbers Conference 2021**
<https://www.linuxplumbersconf.org/event/11/>
<https://linuxplumbersconf.org/event/11/timetable/?view=lpc>

Przykładowe propozycje:

- <https://linuxplumbersconf.org/event/11/contributions/954/> - Use of eBPF in CPU scheduler
- <https://linuxplumbersconf.org/event/11/contributions/1117/> - Challenge of selecting an idle CPU
- <https://linuxplumbersconf.org/event/11/contributions/976/> - Efficient buffered I/O
- <https://linuxplumbersconf.org/event/11/contributions/896/> - Overview of memory reclaim in the current upstream kernel
- <https://linuxplumbersconf.org/event/11/contributions/941/> - Towards a BPF Memory Model (Paul McKenney)
- <https://linuxplumbersconf.org/event/11/contributions/989/> - Building a fast nvme passthrough

10. The 28th ACM Symposium on Operating Systems Principles

<https://sosp2021.mpi-sws.org/program.html>, np.

- ~~Rudra: Finding Memory Safety Bugs in Rust at the Ecosystem Scale (best paper)~~
<https://dl.acm.org/doi/10.1145/3477132.3483570>
<https://www.micahlerner.com/assets/papers/rudra.pdf>
- LineFS: Efficient SmartNIC Offload of a Distributed File System with Pipeline Parallelism (best paper)
<https://dl.acm.org/doi/10.1145/3477132.3483565>
http://nvmw.ucsd.edu/nvmw2022-program/nvmw2022-data/nvmw2022-paper32-final_version_your_extended_abstract.pdf
- Scale and Performance in a Filesystem Semi-Microkernel,
<https://dl.acm.org/doi/10.1145/3477132.3483581>
<https://research.cs.wisc.edu/wind/Publications/ufs-sosp21.pdf>

11. 15th USENIX Symposium on Operating Systems Design and Implementation

<https://www.usenix.org/conference/osdi21>. np.

- ~~Beyond malloc efficiency to fleet efficiency: a hugepage-aware memory allocator~~
<https://www.usenix.org/conference/osdi21/presentation/hunter>

12. FAST'2021, Proceedings of the 19th USENIX Conference on File and Storage Technologies, February 2021

<https://www.usenix.org/conference/fast21/technical-sessions>

(sporo prezentacji na YouTube)

Przykładowe propozycje:

- The Storage Hierarchy is Not a Hierarchy: Optimizing Caching on Modern Storage Devices with Orthus,
<https://www.usenix.org/conference/fast21/presentation/wu-kan>

13. EUROSYS 2021

<https://2021.eurosys.org/papers.html#papers>

Przykładowe propozycje:

- ~~Memory Mapped I/O on Steroids~~

14. Storage Developers Conference 2021

<https://storagedeveloper.org/events/sdc-2021>,

Komplet nagrań na YouTube:

https://www.youtube.com/playlist?list=PLH_ag5Km-YUbveQ0cD-JD8xP0F-1R98UF

Różne

15. Compact NUMA-aware Locks, Dave Dice, Alex Kogan, Oracle labs, 2019

<https://arxiv.org/abs/1810.05600>

<https://arxiv.org/pdf/1810.05600.pdf>

<https://linuxplumbersconf.org/event/11/contributions/966/>

16. What is New in the Linux kernel

<https://lwn.net/Kernel/>

<https://lwn.net/Kernel/Index/> I wyszukać po ostatnim roku

Przykładowe propozycje z 2022:

- <https://lwn.net/Articles/908464/> - How far do we want to go with BPF?
- <https://lwn.net/Articles/885941/> - Moving kernel to modern C
- BPF as a safer kernel programming environment
- <https://lwn.net/Articles/883454/> - A memory allocator for BPF code
- <https://lwn.net/Articles/899274/> - A BPF specific memory allocator
- <https://lwn.net/Articles/889607/> - User events — but not quite yet
- <https://lwn.net/Articles/890025/> - Negative dentries, 20 years later
- <https://lwn.net/Articles/894098/> - Dealing with negative dentries
- <https://lwn.net/Articles/881675/> - The kernel radar: folios, multi-generational LRU, and Rust
- itp

Przykładowe propozycje z 2021:

- <https://lwn.net/Articles/868070/> - More IOPS with BIO caching
- <https://lwn.net/Articles/862707/> - NUMA policy and memory types
- <https://lwn.net/Articles/862018/> - Rust for Linux redux
- <https://lwn.net/Articles/861251/> - Core scheduling lands in 5.14
- <https://lwn.net/Articles/857133/> - Top-tier memory management
- <https://lwn.net/Articles/856931/> - Multi-generational LRU: the next generation
- <https://lwn.net/Articles/855226/> - a pair of memory-allocation improvements in 5.13
- itp.

17. GitHub Copilot

<https://copilot.github.com/>

<https://lwn.net/Articles/862769/> - GitHub in my copilot

AI pair programmer. With GitHub Copilot, get suggestions for whole lines or entire functions right inside your editor. GitHub Copilot works with a broad set of frameworks and languages. The technical preview does especially well for Python, JavaScript, TypeScript, Ruby, and Go, but it understands dozens of languages.

18. Prace z Research at Google, Distributed Systems and Parallel Computing

<https://research.google/research-areas/distributed-systems-and-parallel-computing/>

Zdecydowana większość prac bardzo dobrze pasuje do tematyki seminarium, oczywiście lepsze są te najnowsze, z ostatniego roku.

Pełna lista publikacji: <https://research.google/pubs/?area=distributed-systems-and-parallel-computing>