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ALLIANCE



Community Stream

October 30, 2023

Agenda

- **SIG Guest Languages**
 - Golang Subgroup update
- **WASI 0.2.0 Update**
- **Wasmtime Update**
- **Events**

Questions?

Zulip #community-stream





SIG Guest Languages **Golang Subgroup**

Jiaxiao (Joe) Zhou

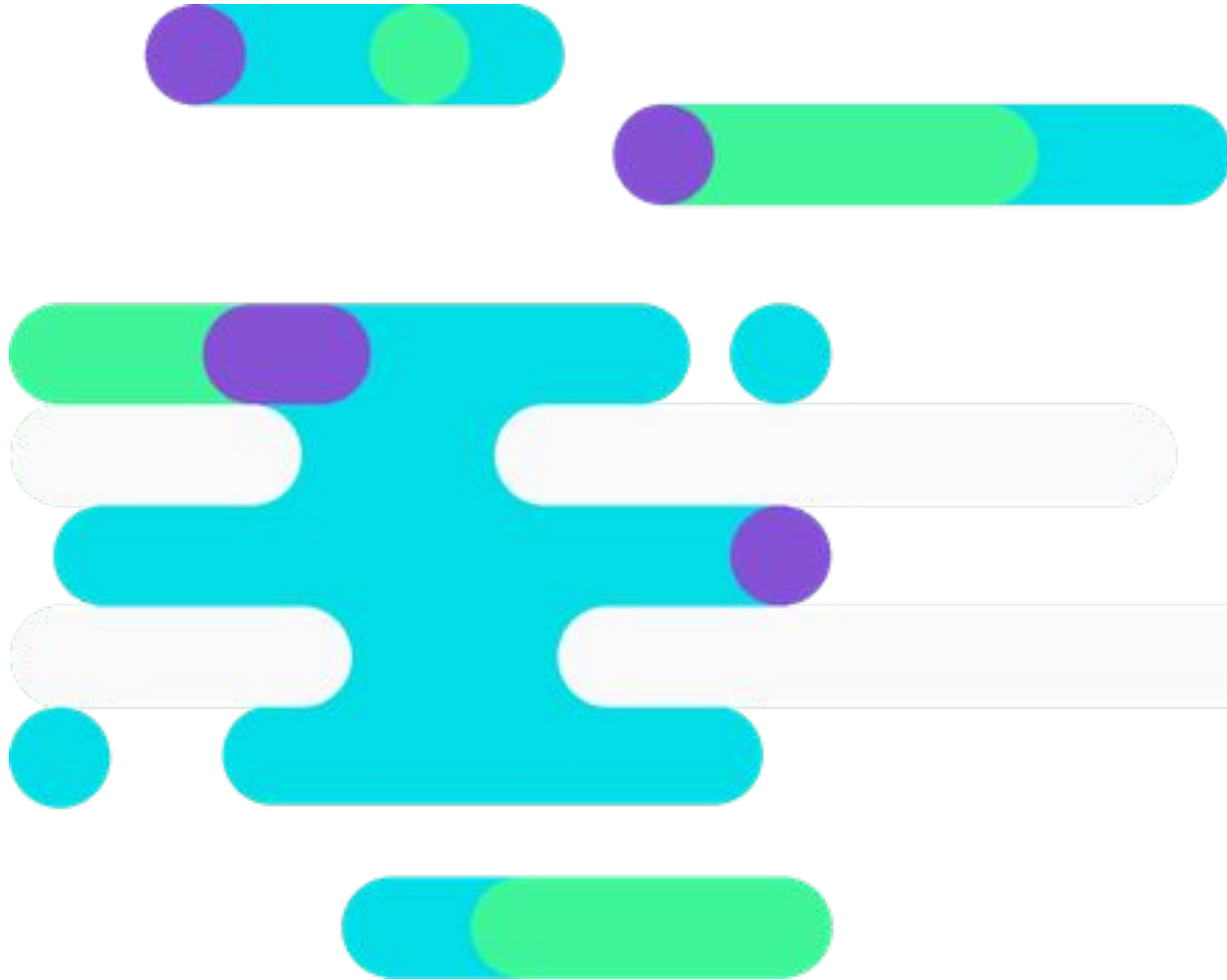
Golang Subgroup

- **Goal: make Wasm components native to the Go ecosystem**
 - Binding generators, Toolings and Compiler
- **Go 1.21 supports wasip1: demo**
 - [WASI support in Go - The Go Programming Language](#)
 - Join #webassembly on the Gopher Slack
- **Current work:**
 - [Go memory management in the WebAssembly Component Model proposal: cmd/compile: add go:wasmexport directive](#)
 - Wit-bindgen-go support for resources
 - [ydnar/wasm-tools-go](#)

Golang Subgroup

- Meet every other Tuesday at 10 PST
- Attending
 - Email jiazho@microsoft.com or achille@stealthrocket.tech
- Agenda: Google [docs](#)

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WASI 0.2.0

Pat & Bailey
WASI Co-Chairs

WASI 0.2.0

Upcoming WASI SG meetings

- November 2nd
 - Poll for reframing WASI to stand for "**WebAssembly Standard Interfaces**" ([WASI/#563](https://github.com/WebAssembly/WASI/pull/563))
- November 16th
- November 30th
- December 14th

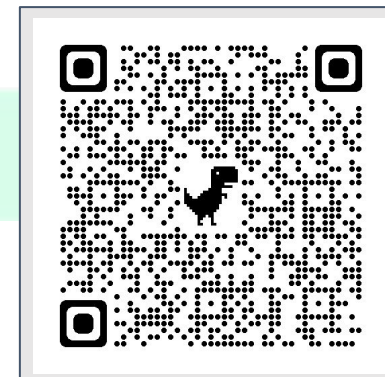
What's next? Phase 3 with two implementations!

More details on the phase process













<https://github.com/WebAssembly/WASI/blob/main/preview2/README.md#proposal-requirements-for-inclusion-in-wasi-preview-2>

Two worlds are now at Phase 2 🎉

- `wasi-cli`
- `Wasi-http-proxy`



WASI 0.2.0 Progress

34	🟢 Wasmtime wasi-sockets implementation: Tests demonstrate portability criteria met #7014	 sunfishcode	In Progress	wasi:tests
35	🟢 Jco transpile: nonblocking implementation of poll-oneoff #153	 guybedford and yo...	In Progress	enhancement target-we
36	🟢 Componentize-js: event loop integrated with preview2 poll #50	 tschneidereit	In Progress	
37	🟢 Componentize-js: port fetch and related builtins to wasi-http #51	 tschneidereit	In Progress	
38	🟢 wit-bindgen go: support resources #696	 Mossaka	In Progress	gen-tinygo
39	🟢 wasi-http: spec document behaviors for content-encoding, upgrade, other headers with porta... #7271	 lukewagner	In Progress	
40	🟢 wasi-filesystem: implement access-mode related functions #7354	 sunfishcode	In Progress	
41	🟢 wasi-http: test that configured timeouts raise errors #7356	 elliottt	In Progress	
42	🟢 Wasmtime wasi-sockets implementation: Finish tweaks to spec #7013			wasi:impl
43	🟢 Jco transpile: implementation of wasi-sockets for Node.js #154	 manekinekk		enhancement target-no
44	🟢 Jco transpile: implementation of wasi-http for Web #155	 guybedford		enhancement target-we
45	🟢 Wasmtime wasi-http: use Web Platform Tests with Componentize-js to test implementations #7062	 tschneidereit		
46	🟢 Fill out the error variant in wasi-http #7428	 pchickey		



Wasmtime v14 and v15

Pat Hickey

Wasmtime 14

- **wasi:http** implementation
 - Uses **{input,output}-stream** from the **wasi:io/streams** interface [#7056](#)
 - **wasi:http** inbound requests support
 - **wasmtime serve** command [#7091](#)
- **wasi:sockets/ip-name-lookup** implementation [#7109](#)
- **CLI interface changes**
 - [wasmtime/issues/7384](#)

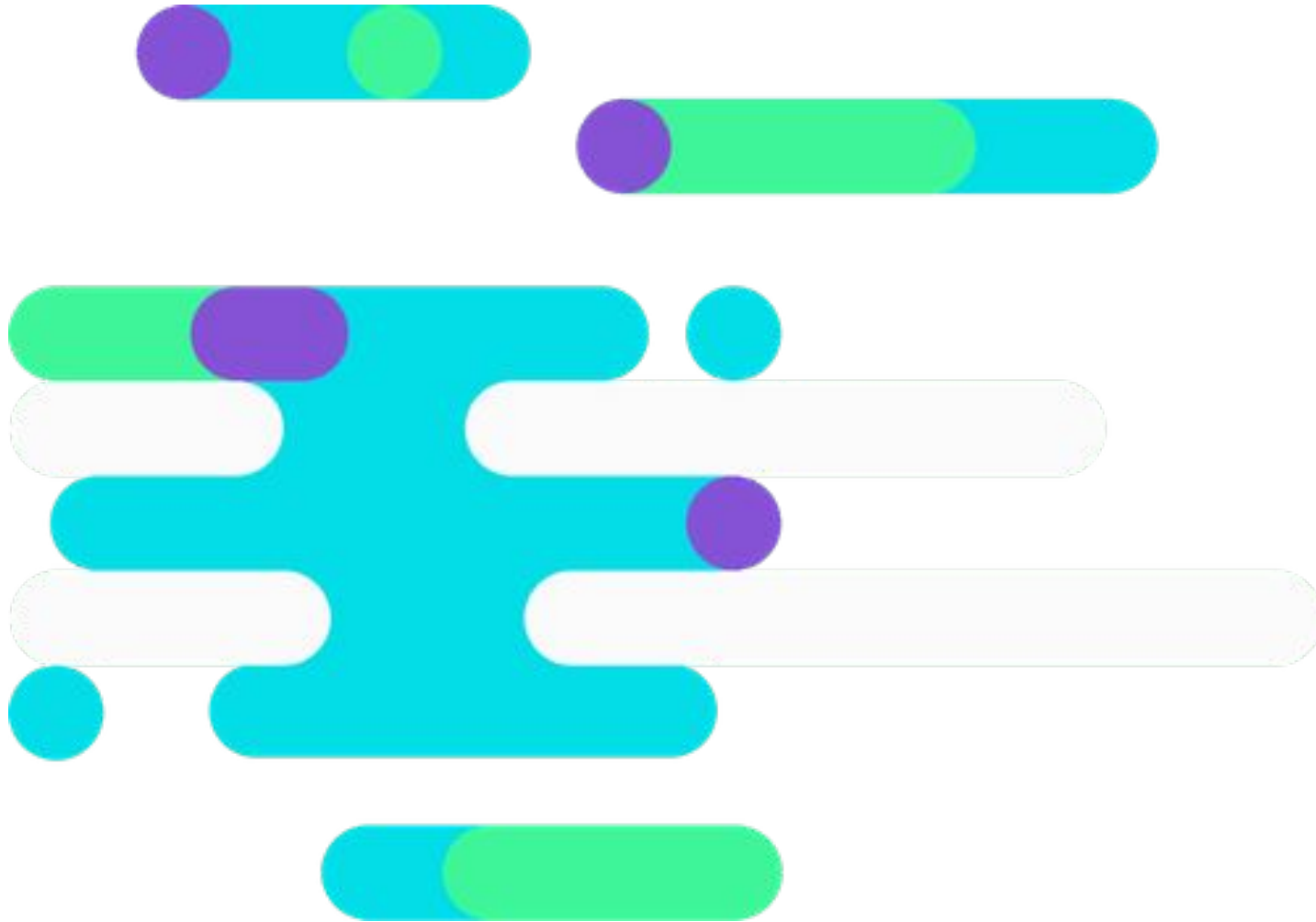
Wasmtime 15

Release date is end of November

Will use pinned WIT definitions from upstream

Expecting wasi-sockets and wasi-http implementations to be complete

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Events

Kubecon Wasm Social - November 5

Join us for the Wasm Social, hosted by the WebAssembly Community Meetup groups from around the world!

<https://www.eventbrite.com/e/wasm-social-tickets-736290965097>

When: Sunday, 8 - 10PM

Where:

VU Rooftop Bar,
133 East Cermak Road Chicago, IL 60616



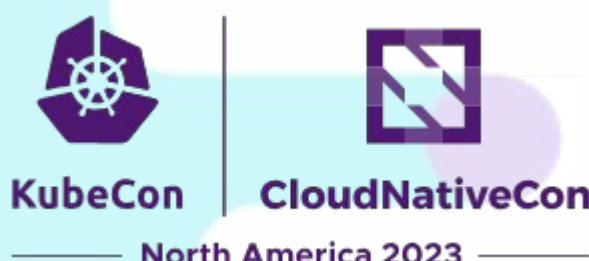
WasmDay and Kubecon - November 6, 2023

WasmDay is Next Monday Nov 6th, Kubecon 7-9



CLOUD NATIVE
Wasm DAY
NORTH AMERICA

Time	Topic
9:00am CST	Welcome • Opening Remarks, Program Committee Members - Lin Sun, Solo.io & Liam Randall, Cosmonic
9:15am CST	WebAssembly Component Model: Enhancing Security, Productivity, and Green Computing - Bailey Hayes, Cosmonic & Kate Goldenring, Fermyon Technologies, Inc.
9:50am CST	Running Linux-Based Containers on Wasm and Browser with Container2wasm Converter - Kohei Tokunaga, NTT
10:25am CST	A Love Letter to Isolation - Kelly Shortridge, Fastly
10:50am CST	AM Break 2: Sponsored By OpenSearch
11:05am CST	The Falco Playground: A Cocktail of WebAssembly and Runtime Security - Jason Dellaluce, Sysdig & Rohith Raju, Independent
11:40am CST	Extending Sidecarless Applications with Wasm in Istio Ambient Mesh - Lin Sun & Ben Leggett, Solo.io
12:15pm CST	Extending a High-performance Data Streaming System with WebAssembly - Tyler Rockwood, Redpanda
12:40pm CST	Lunch 4
1:30pm CST	Syscall Me by Your Name: Sandboxing Wasm Programs - Ryan Petrich, Two Sigma Investments
2:05pm CST	Navigating Strategies for Debugging WASM - Ashwin Kumar Uppala, GitHub & Shivay Lamba, Mellsearch
2:40pm CST	Exploit Parallelism for AI Workloads with WASM and OpenMP - Atanas Atanasov & Andrew Brown, Intel
3:05pm CST	PM Break 3: Sponsored By OpenSearch
3:15pm CST	Orchestrating Wasm: Reconciliation Loops Aren't Owned by Kubernetes - Taylor Thomas & Dan Norris, Cosmonic
3:50pm CST	Wasm Workers Server: Portable Serverless Apps with WebAssembly - Angel M De Miguel Meana & Rafael Fernández López, VMware
4:25pm CST	Wasm is Becoming the Runtime for LLMs - Michael Yuan, Second State
4:55pm CST	Lightning Talk: WebAssembly from the Inside Out - Edoardo Vacchi, Tetrate
5:05pm CST	Closing Remarks, Program Committee Members - Lin Sun, Solo.io & Liam Randall, Cosmonic



KubeCon | CloudNativeCon
North America 2023

Time	Topic
Tuesday, November 7	
11:00am CST	Tutorial: Building Cloud-Native Applications Using WebAssembly and Containers - Mikkel Mørk Hegnhøj & Melissa Klein, Fermyon; Ralph Squillace, Microsoft
2:30pm CST	Runwasi: WebAssembly Serverless for Containerd - Angel M De Miguel Meana, VMware & Francisco Cabrera, Microsoft
Wednesday, November 8	
2:30pm CST	Delivering Backends Like Frontends with WebAssembly - Brooks Townsend, Cosmonic
3:25pm CST	Phippy's Field Guide to Wasm - Karen Chu & Matt Butcher, Fermyon
	SIG Scheduling Updates - Aldo Culquicondor, Google & Kensei Nakada, Mercari
Thursday, November 9	
2:00pm CST	eBPF + Wasm: Lightweight Observability on Steroids - Michael Yuan, WasmEdge & Yusheng Zheng, eunomia-bpf
	Bringing Cloud Native WASM to the mainstream with WASM Working Group - Shivay Lamba, Mellsearch & Kevin Hoffman, Cosmonic
	The Cloud-Native Workloads Journey Through the CNCF Tag-Runtime - Ricardo Aravena, TruEra & Heba El Ayoty, Microsoft

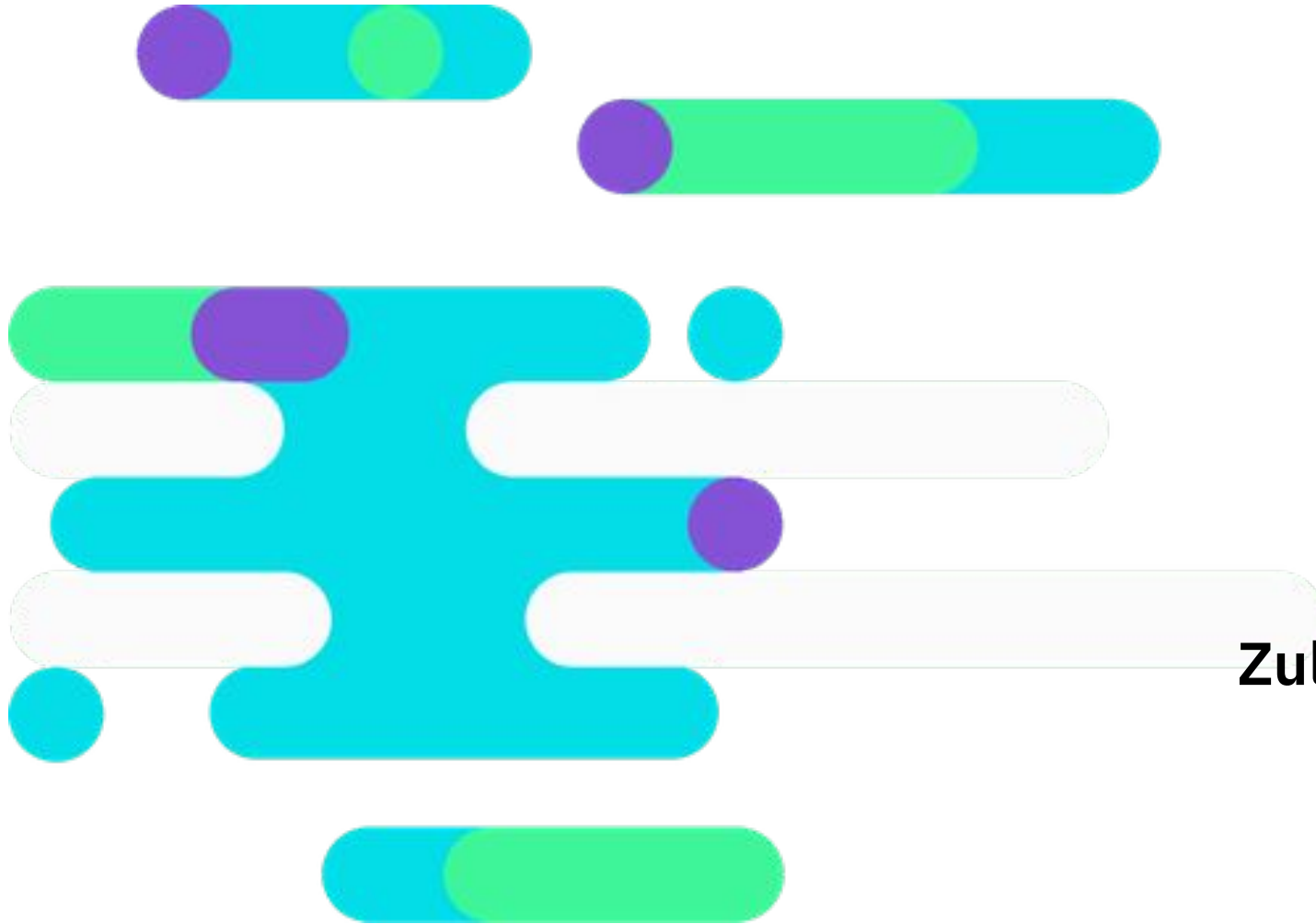
Wasm I/O 2024

14 -15 MAR · Barcelona

<https://2024.wasmio.tech/#cfp>

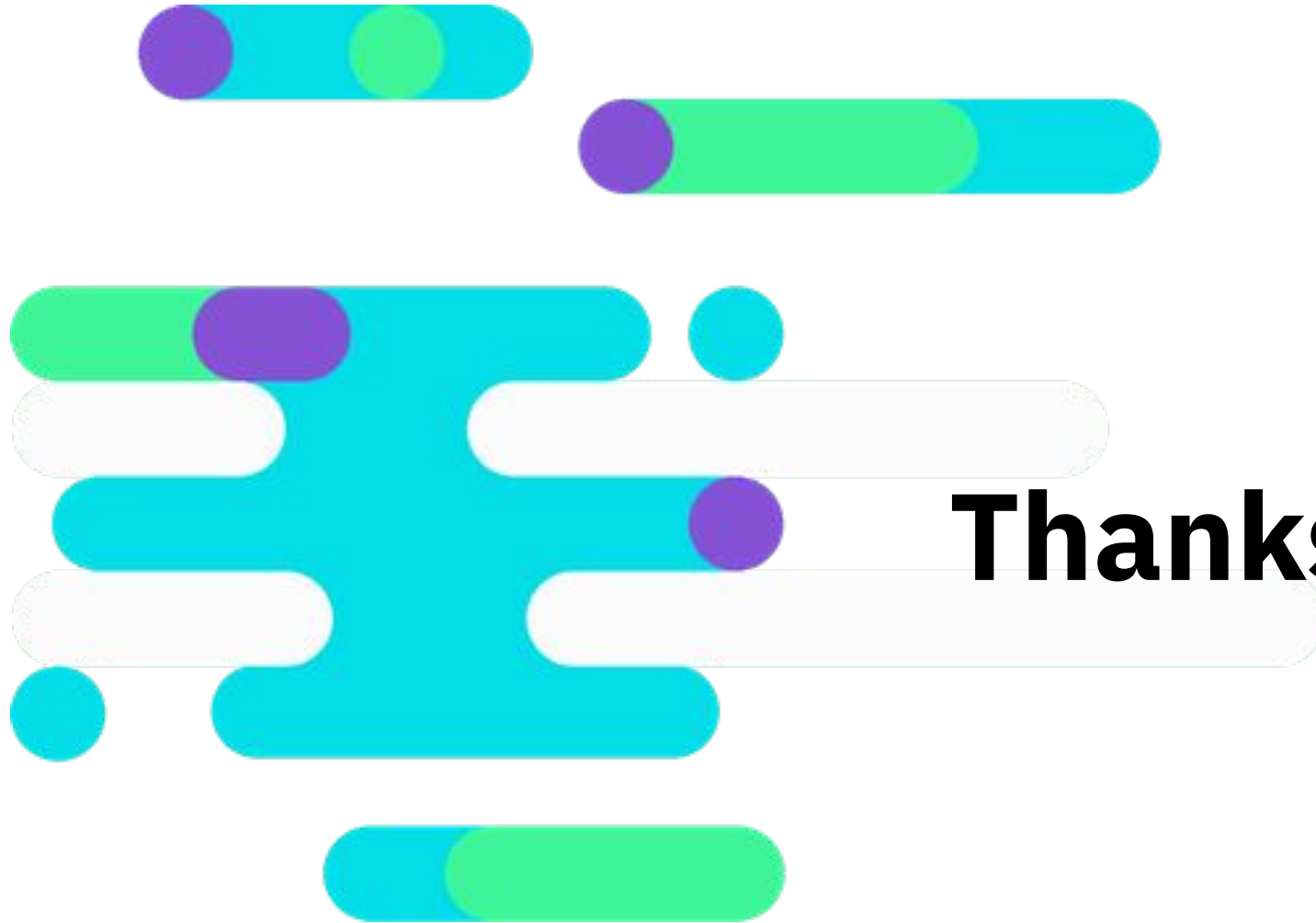
Checkout last year: <https://2023.wasmio.tech/>

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Q&A

Zulip [#community-stream](#)



Thanks for watching!