



BERLIN ALL HANDS



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# Guten tag!

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- ❖ Welcome to the *first ever* Rust All Hands!
- ❖ Vital info:
  - ❖ Wifi: “Mozilla Guest”
  - ❖ <http://bit.do/rust-berlin>
  - ❖ Code of conduct

*“We are committed to providing a friendly, safe and welcoming environment for all”*



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# Why are we here?

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# Why are we *here*?

What city / state / region / country do you live in?

7,768 responses

Germany (367)

France (176)

UK (97)

Sweden (92)

California (79)

Canada (78)

Australia (74)

London, UK (70)

Poland (64)

Norway (61)

Berlin, Germany (59)

London (59)



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# Why are *we* here?

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- ❖ There are ~50 of us here
- ❖ Only ~1 / 3 employed by Mozilla
- ❖ Spanning 15 different teams / working groups

Infra

WG-CLI

WG-Net

WG-Embedded

WG-Wasm

Compiler

Community

Docs

Tools

Cargo

Unsafe code guidelines

Web site

Rust Reach

Lang

Libs

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# *Why* are we here?

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- ❖ *In theory:* Rust 2018
- ❖ *In practice:* because Rust is cool, fun, and exciting

“Rust is a chance to get things right.”

*—a common feeling*

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# It's about people

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We all love the technology,  
the ideas, and want to  
polish them to perfection

But we have to remember,  
at the end of the day, it's  
about *people*





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# It's about people

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- ❖ If we don't ship,  
*our “perfect” work is irrelevant*
- ❖ If “getting things right” makes Rust too hard,  
*people won't use it*
- ❖ If we don't document what we've built,  
*people won't understand it*
- ❖ If we don't explain what we're doing,  
*people won't appreciate it*

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# It's about people... *and* tech

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- ❖ Rust is at its best when it *aligns* people and technology:
  - ❖ Iterator design
  - ❖ Rayon
  - ❖ rustc compiler errors
  - ❖ “Hack without fear”
- ❖ Rust is an empowering technology

Rust [is] broadly empowering: not only does it allow C++ programmers to be more effective, but people who have little or no low-level programming experience are able to create things they've never been able to before.

*–Dave Herman*

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# Rust 2018 is about people

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- ❖ **Explain it**

- ❖ Major “edition” release: a chance to tell our story
- ❖ Complete website overhaul; “what is Rust for?”
- ❖ Domain WGs: complete “user stories” for Rust
- ❖ Production user white papers



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# Rust 2018 is about people

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- ❖ **Document it**

- ❖ TRPL 2018 edition!
- ❖ Domain WG docs for each domain
- ❖ API guidelines
- ❖ Cookbook
- ❖ Intermediate-level docs
- ❖ rustdoc support for books
- ❖ Alternative-style “docs”: videos, exercises, etc

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# Rust 2018 is about people

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- ❖ **Ship it**

- ❖ Rust 2018 is a focal point for stabilization and polish
- ❖ Just like with 1.0, shipping at this scale is hard; we have to accept that we'll make some mistakes
- ❖ **Requires team coordination** — a big goal this week

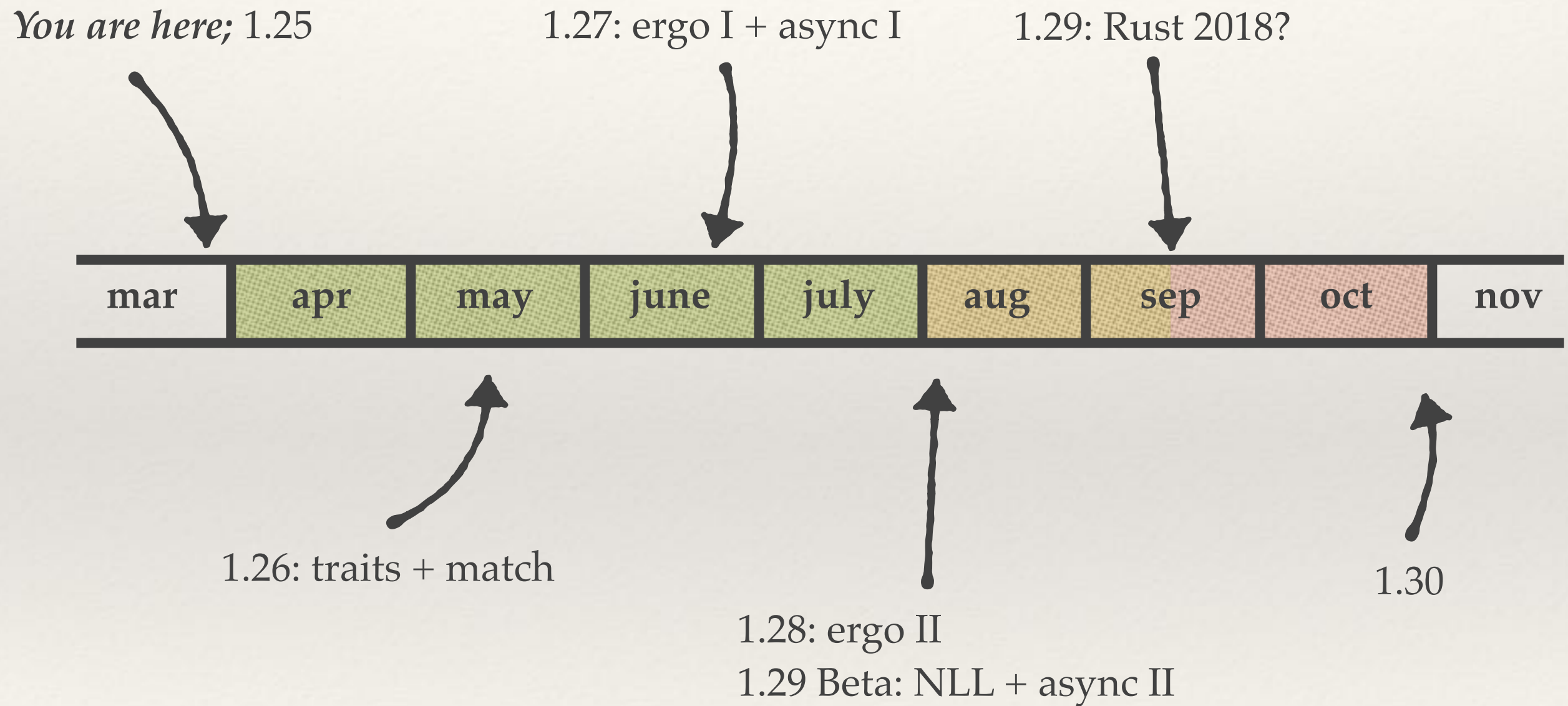
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# Rust 2018 is about people... *and* tech

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- ❖ `impl Trait`
- ❖ `async/await`
- ❖ `NLL`
- ❖ `stable procedural macros`
- ❖ `RLS 1.0`
- ❖ `rustfmt 1.0`

# How do we do it?







# Rust project management dashboard



File Edit View Insert Format Data Tools Add-ons Help All changes saved in Drive



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DESCRIPTION

|    | A   | B        | C      | D    | E     | F                  | G                  | H                  | I   | J            | K             | L           | M           | N        | O       |
|----|---|----------|--------|------|-------|--------------------|--------------------|--------------------|-----|--------------|---------------|-------------|-------------|----------|---------|
| 1  | DESCRIPTION                               |          |        |      |       |                    |                    |                    |     |              | WEEKLY STATUS |             |             |          |         |
| 2  | ITEM                                      | CATEGORY | TARGET | Plan | RFC   | Nightly            | FCP                | Stab               | Doc | OWNER        | 5 March       | 12 March    | 19 March    | 26 March | 2 April |
| 3  | <a href="#">In-band lifetimes</a>         | Compiler | 1.27   |      | ✓     |                    |                    |                    |     | nmatsakis    | Behind        | Behind      |             |          |         |
| 4  | <a href="#">L' notation</a>               | Compiler | 1.26   | ✓    | ✓     | ✓                  | 🐛                  |                    |     | nmatsakis    | Behind        | On track    | On track    |          |         |
| 5  | <a href="#">L lints</a>                   | Compiler | 1.27   |      | ✓     |                    | N/A                |                    | N/A | nmatsakis    |               |             | On track    |          |         |
| 6  | <a href="#">L elision in impl headers</a> | Compiler | 1.27   |      | ✓     |                    |                    |                    |     | nmatsakis    |               | Behind      | On track    |          |         |
| 7  | <a href="#">L lints for in-band</a>       |          | ?      |      | ✓     |                    |                    |                    |     |              |               |             |             |          |         |
| 8  | <a href="#">Infer T: 'x bounds</a>        | Compiler | 1.28   |      | ✓     |                    |                    |                    |     | nmatsakis    | Behind        | On track    | On track    |          |         |
| 9  | <a href="#">Implied bounds</a>            | Compiler | 1.27   |      | ✓     |                    |                    |                    |     | nmatsakis    |               | On track    | On track    |          |         |
| 10 | SLG solver spike                          | Traits   | 1.26   |      |       |                    |                    |                    |     | nmatsakis    | On track      | On track    | On track    |          |         |
| 11 | <a href="#">NLL</a>                       | Compiler | ?      | SOS  | ✓     |                    |                    |                    |     | prnfelix     | On track      | Behind      | Behind      |          |         |
| 12 | <a href="#">dyn Trait</a>                 | Compiler | 1.26   | ✓    | ✓     | ✓                  | <a href="#">r?</a> |                    |     | nmatsakis    | On track      | Blocked     | Behind      |          |         |
| 13 | <a href="#">impl Trait</a>                | Lang     | 1.26   | ✓    | ✓     | ✓                  | 🐛                  |                    |     | cramertj     | Blocked       | On track    | Behind      |          |         |
| 14 | <a href="#">impl Trait</a>                | Lang     | 1.26   | ✓    | ✓     | ✓                  | 🐛                  |                    |     | cramertj     | On track      | On track    | On track    |          |         |
| 15 | <a href="#">never_type</a>                | Compiler | 1.26   |      | ✓     | ✓                  | ✓                  | ✓                  |     | nmatsakis    | On track      | On track    | On track    |          |         |
| 16 | <a href="#">match ergonomics</a>          | Lang     | 1.26   |      | ✓     | ✓                  | ✓                  | SOS                |     | nmatsakis    | On track      | Blocked     | Behind      |          |         |
| 17 | <a href="#">Copy-ocercions</a>            | Lang     | 1.27   | ✓    |       | qmx                |                    |                    |     | nmatsakis    | Behind        | Behind      | On track    |          |         |
| 18 | <a href="#">Generators</a>                | Lang     | ?      | SOS  |       |                    |                    |                    |     | nmatsakis    |               |             | Not started |          |         |
| 19 | <a href="#">async await</a>               | Lang     | ?      |      | boets |                    |                    |                    |     | withoutboets | Not started   | Not started |             |          |         |
| 20 | <a href="#">? in main</a>                 | Compiler | ?      |      | ✓     | ✓                  |                    |                    |     | nmatsakis    |               |             |             |          |         |
| 21 | <a href="#">L language changes</a>        | Compiler | 1.26   | ✓    | ✓     | ✓                  | ✓                  | <a href="#">PR</a> | SOS | nmatsakis    | On track      | On track    | On track    |          |         |
| 22 | <a href="#">L test changes</a>            | Lang     | 1.27   |      | SOS   |                    |                    |                    |     | nmatsakis    |               |             | Blocked     |          |         |
| 23 | <a href="#">L library changes</a>         | Libs     | ?      |      |       |                    |                    |                    |     | nmatsakis    |               | Not started |             |          |         |
| 24 | <a href="#">Proc macros</a>               | Compiler | ?      | SOS  | ✓     |                    |                    |                    |     | acrichlo     |               | On track    | Blocked     |          |         |
| 25 | <a href="#">L modules integration</a>     | Compiler | ?      | SOS  | ✓     |                    |                    |                    |     | acrichlo     |               |             |             |          |         |
| 26 | <a href="#">Caller loc unwrap</a>         | Compiler | ?      |      | ✓     | SOS                |                    |                    |     | ??           |               | Behind      | Not started |          |         |
| 27 | Compiler perf                             | Compiler | ?      |      |       |                    |                    |                    |     | mw           |               | On track    | On track    |          |         |
| 28 | <a href="#">Raw identifiers</a>           | Compiler | 1.27   | ✓    | ✓     | <a href="#">PR</a> |                    |                    |     | nmatsakis    |               | On track    | On track    |          |         |
| 29 | <a href="#">epoch hygiene</a>             | Compiler | ?      |      |       |                    |                    |                    |     | Manishearth  |               | Not started | Not started |          |         |
| 30 | Epoch lints                               | Compiler | ?      |      |       |                    |                    |                    |     | Manishearth  | On track      | On track    | On track    |          |         |
| 31 | <a href="#">Module path changes</a>       | Lang     | 1.28   |      |       | 1.27               |                    |                    |     | nmatsakis    | Behind        | On track    | On track    |          |         |
| 32 | <a href="#">Trait aliases</a>             | Compiler | 1.27   | SOS  |       |                    |                    |                    |     | nmatsakis    |               | Behind      | Behind      |          |         |
| 33 | Easy edition feature flag                 | Lang     | 1.26   |      |       |                    |                    |                    |     | Manishearth  |               |             | On track    |          |         |
| 34 | <a href="#">Finalize new keywords</a>     | Lang     | 1.27   |      |       |                    |                    |                    |     | Centril      | Behind        | Behind      | On track    |          |         |



Nicholas Matsa...

11:24 PM Mar 18

No progress last week, b  
to hack/meet on Monday



Nicholas Matsaki

9:18 PM Mar 20

Had the meeting and ba  
working now! Need to se  
schedule.

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# This week

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- ❖ **Come away ready and excited to finish Rust 2018**
- ❖ Teams have formal meeting allotments
- ❖ Some special cross-team meetings!
- ❖ Community space + small meeting rooms available also
- ❖ We'll hear from various team leads throughout
- ❖ *Most important: have fun!*

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# The rest of the day

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- ❖ <http://bit.do/rust-berlin>
- ❖ Introductions
- ❖ Team goals
- ❖ Niko on contribution, mentoring, & participation
- ❖ *Lunch at noon*
- ❖ Two technical sessions, covering:  
macros 2.0, CLI, compiler consumers, Cargo