

Program Report PLDI 2010

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Thanks!

- Ben Zorn
- The Program Committee
- The ERC and other reviewers
- The PLDI steering committee

The Process

The Program Committee

- 22 people
- Papers received ≥ 3 PC reviews
 - Except for PC submissions
- Met for 1.5 days in January
 - Every PC member attended
 - 11.5 hours of discussion

The External Review Committee (ERC)

- 57 people
- Every paper received ≥ 1 ERC review
 - Except for PC submissions
- Discussion via
 - conference software
 - email
 - phone calls

Why Have an ERC?

- Deal with double-blind reviewing conflicts
 - More on this shortly
- Organize and recognize ERC
 - We have an ERC whether we call it that or not

Significant Changes This Year

- Allowed PC submissions
- Changes to double-blind reviewing guidelines

PC Submissions

- The problem
 - PC accept rates declining
 - Becoming burdensome to staff the PLDI PC
 - #1 reason: the PC submission policy
 - The PC has been banned from submitting for many years
- Consensus
 - A real problem
 - Needed to be fixed

PC Submissions (Cont.)

- Design a mechanism for evaluating PC submissions with no conflicts of interest
- Principle
 - No PC member participates in evaluation or discussion of any PC paper
- Solution
 - The ERC reviews and decides PC submissions
 - Consensus required to accept a PC paper
 - i.e., all reviewers must agree the paper is acceptable

Double-Blind Reviewing Issues

- Only the PC chair knows reviewers and authors
 - Bottleneck in, e.g., detecting conflicts of interest
 - Single point of failure
- Double-blind reviewing not always desirable
 - Potential for authors to use it to withhold information
 - Lack of context for reviewers
- Unclear rules for authors
 - No bright line between what is and what is not permitted in submissions
 - See past efforts to write double-blind submission policies. . .

Double-Blind Reviewing Changes

- Simplified policy
 - Only two rules:
 - No author names/institutions in the paper
 - Use 3rd person to describe own prior work
- Author identities revealed before feedback
 - Made feedback direct
 - Gave reviewers time to consider context

"First-read double-blind"

Feedback

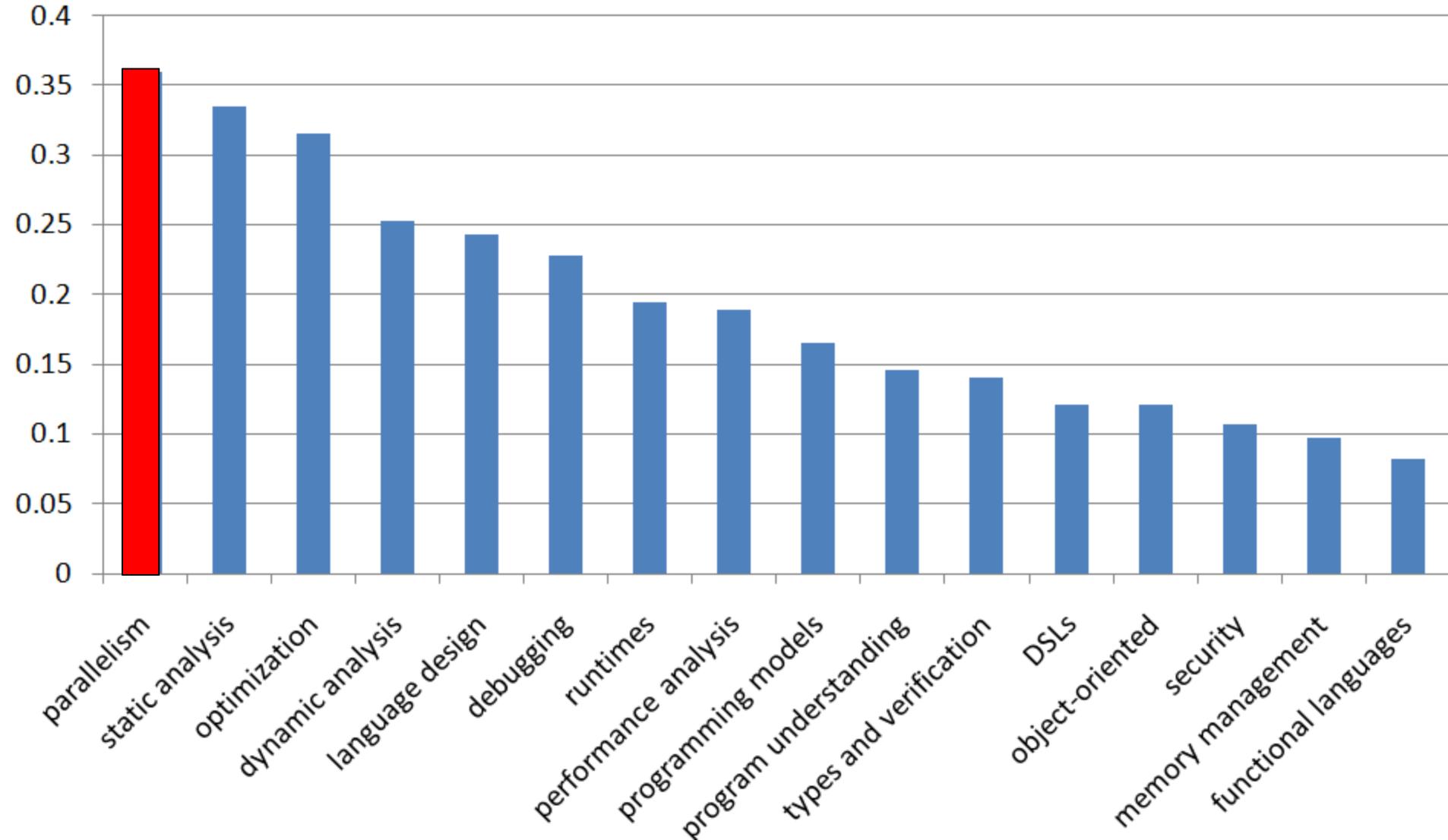
- On PC submissions
 - Positive
- On double-blind reviewing
 - Positive from authors & PC members
 - Some negative feedback from double-blind champions
 - But some of these people become more agreeable after hearing about the problems the simplified policy addresses

The Papers

The Bottom Line

- 206 submissions
 - 41 papers accepted
 - 20% accept rate
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- Accept rate was the same for PC papers

Submissions By Topic



Accept Rate by Topic

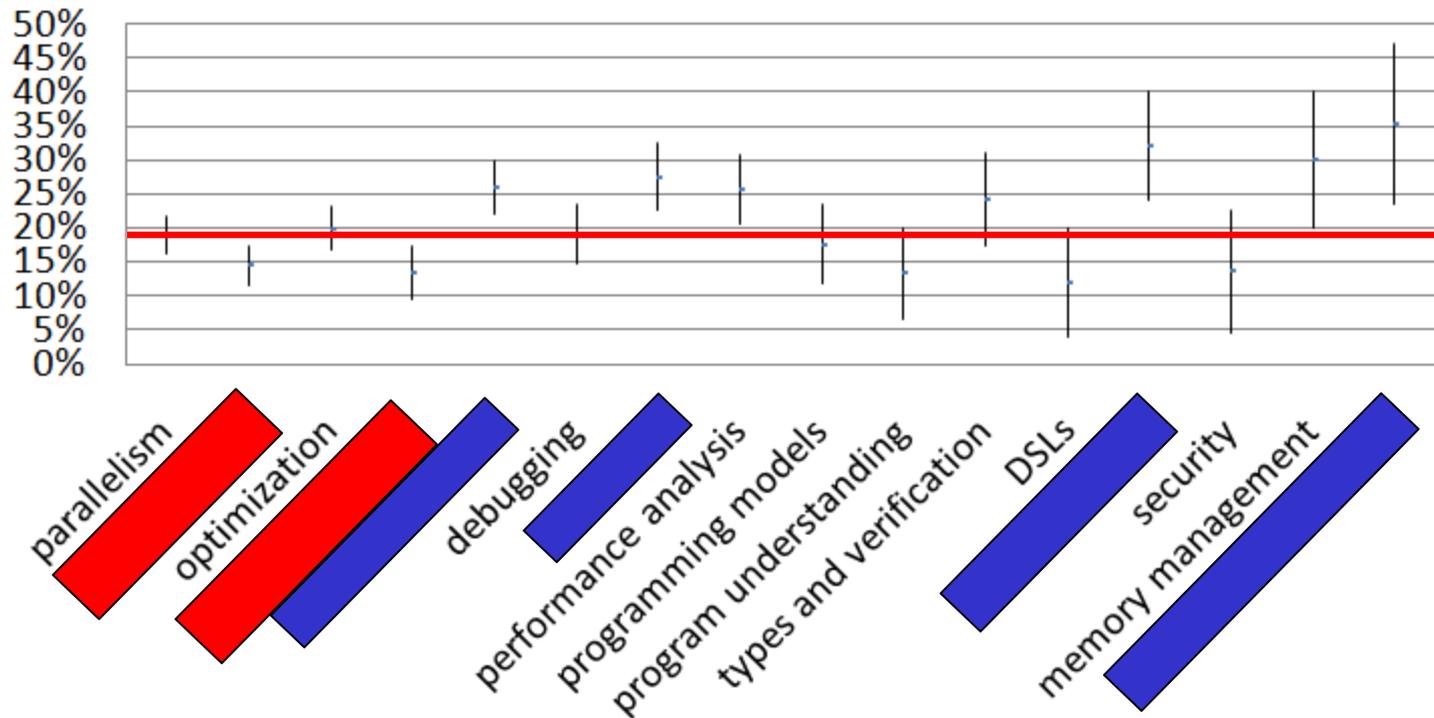
Key:

Red line: overall accept rate

Red topics: below average accept rate

Blue topics: above average accept rate

Topics sorted by decreasing # of submissions



"Error bars" show accept rate +/- 2 papers

**And Now For Something Completely
Different . . .**

The Health of the Field

A Conversation

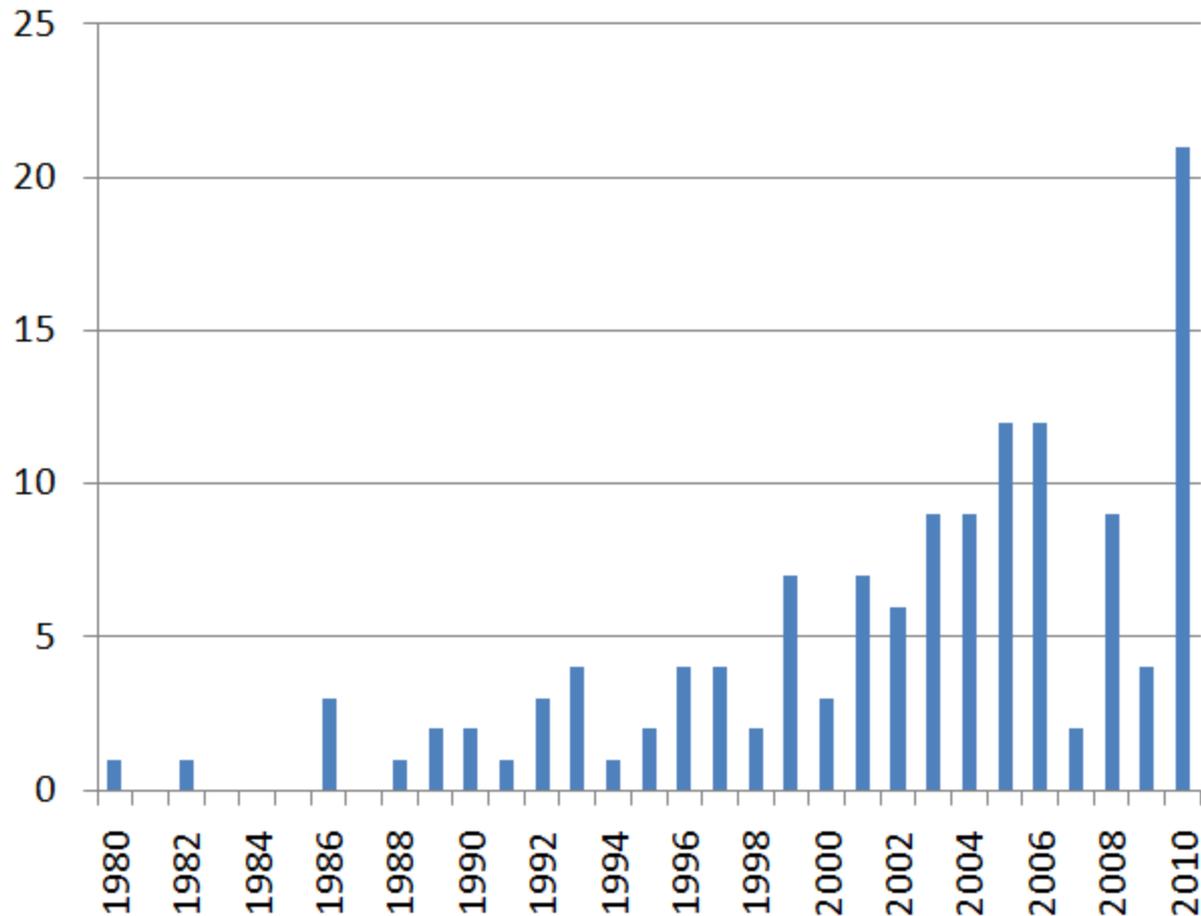
- "I worry that programming languages is dying as a research field."
 - A respected colleague
- My perception is just the opposite!
- But, is the statement true?
- How can we measure the health of a field?

Measures

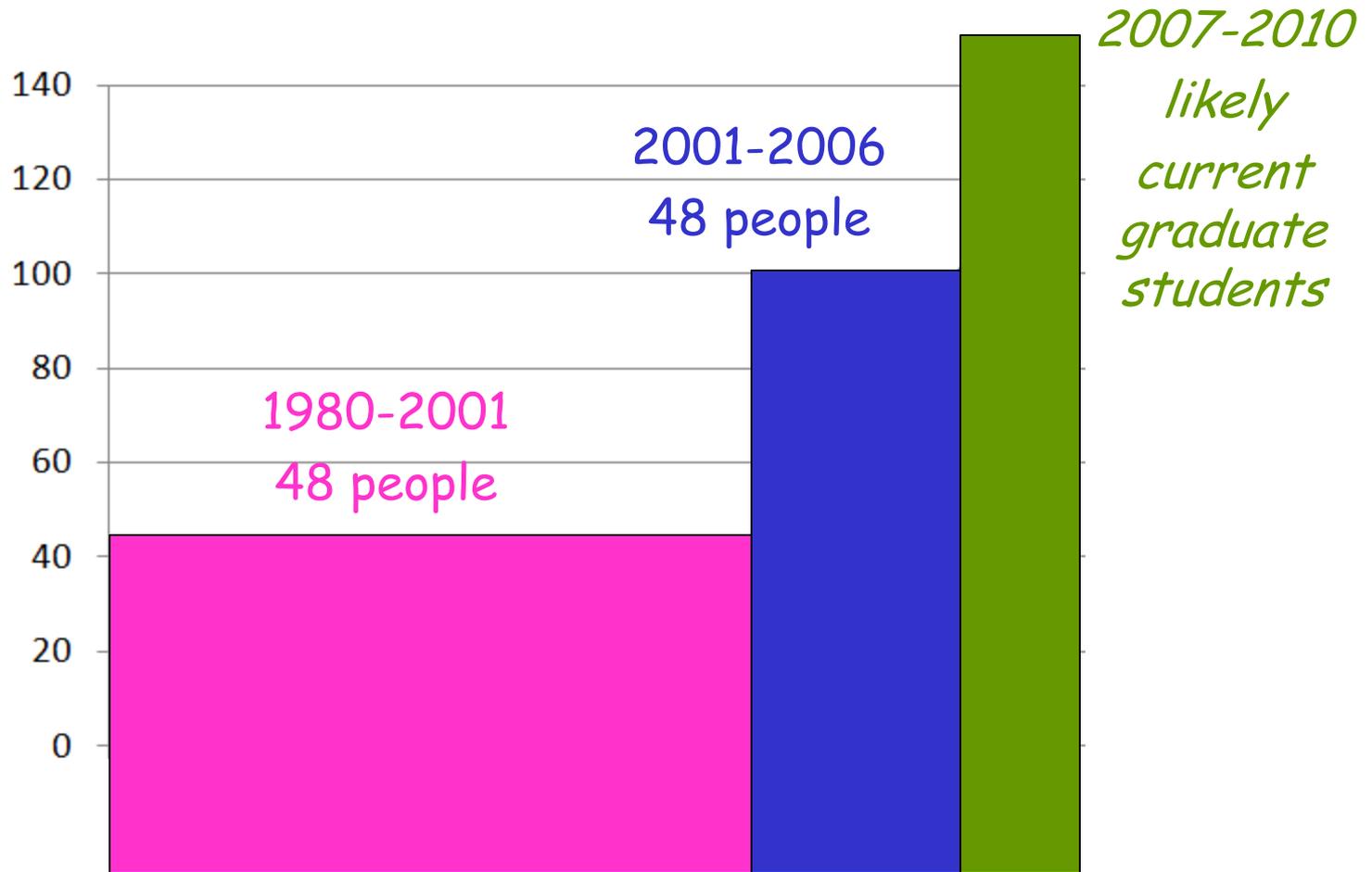
- Standard measures
 - Papers, citations, conferences
 - All look healthy
 - But these are lagging indicators
- People
 - Is the field attracting new talent?
 - Predictive of activity in the future

Year of 1st Paper for PLDI'10 Authors

Graph shows number of PLDI'10 authors who published their first scientific paper (in any forum according to DBLP) in a given year.

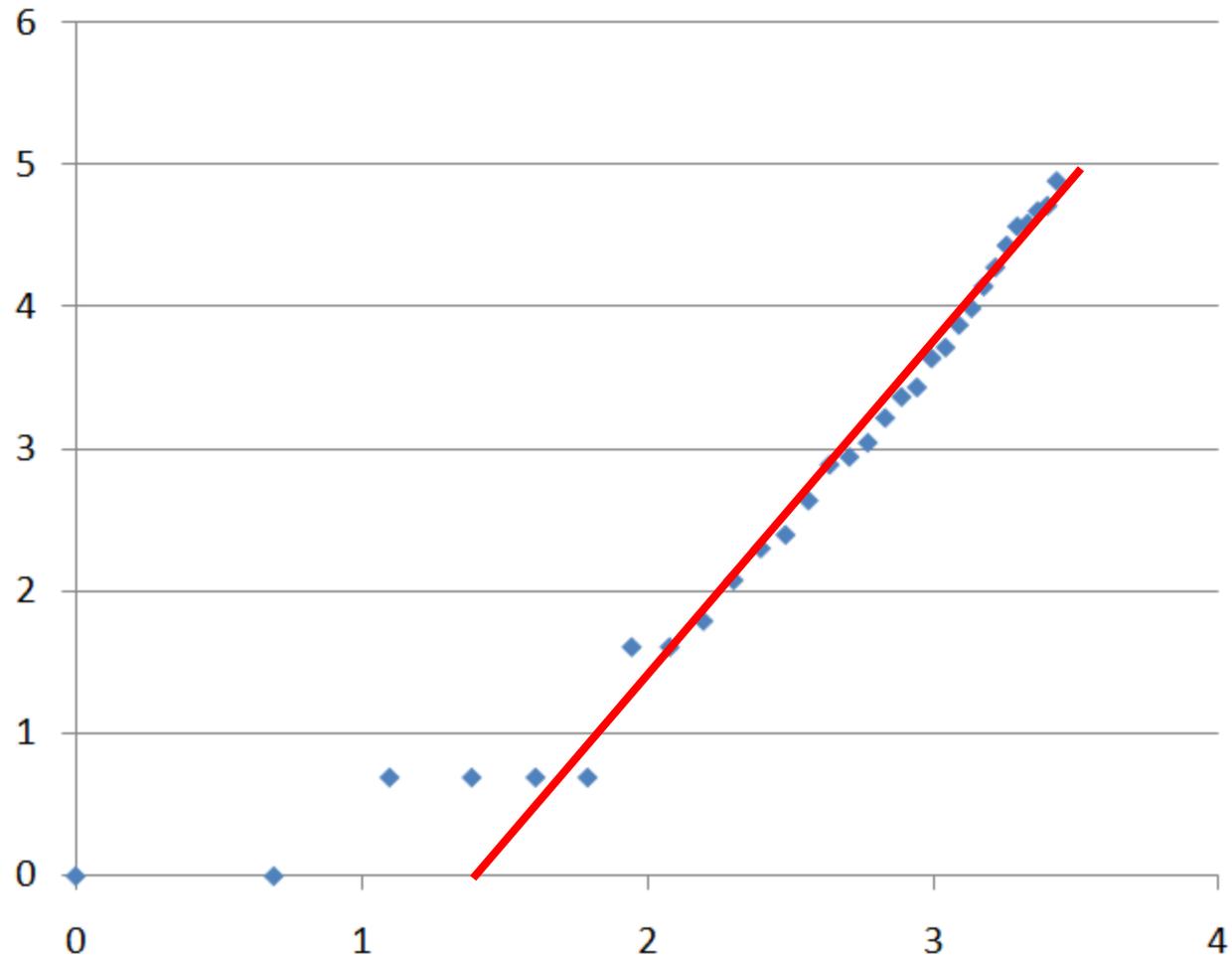


Cumulative Plot



Conclusion: The field's pipeline is healthy!

Log-Log Plot



What Does This Mean?

- The log-log plot is very nearly linear
 - Only significant deviation is in the region where there is very little data anyway
 - Strongly suggests the number of active researchers follows a *power law*
 - A polynomial whose degree is the slope of the line in the log-log plot
- Conclusion: People drop out of research at a steady rate all ages

Possible Explanations

- Mentors
 - Senior people work with junior people
- Deadwood
 - Senior people publish fewer papers
- Moving on
 - There is life after research

Conclusions

- Good news
 - Lots of young people entering the field
 - Just like always
- Melancholy news
 - Half of us won't be here in 5-7 years
 - Applies almost equally to all levels of seniority