

# Program Report PLDI 2010

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# Thanks!

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

# The Process

# The Program Committee

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- 22 people
- Papers received  $\geq 3$  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)

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

# Why Have an ERC?

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- 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

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

# PC Submissions

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- 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.)

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- 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

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- 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

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- Simplified policy
  - Only two rules:
  - No author names/institutions in the paper
  - Use 3<sup>rd</sup> 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

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- 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

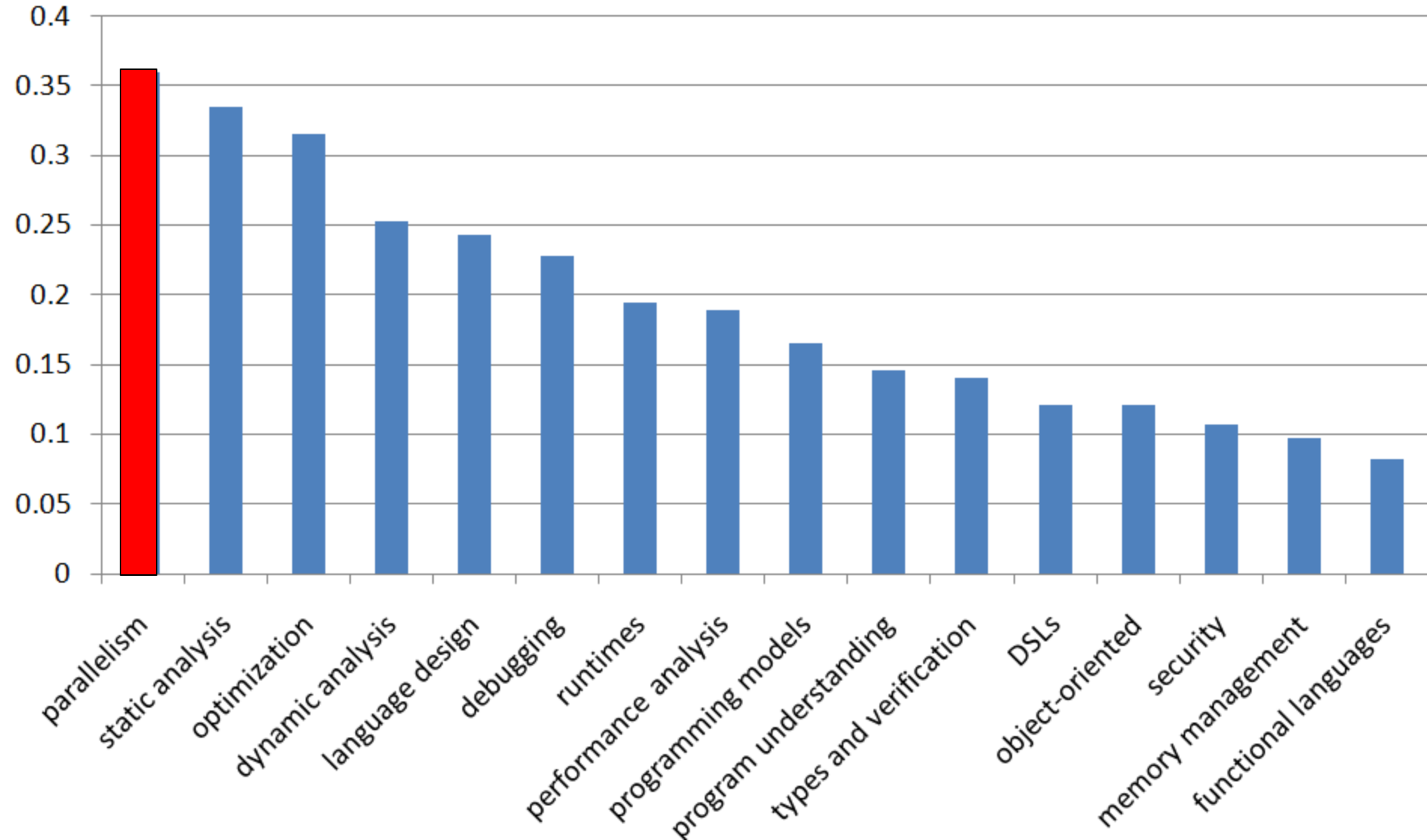
# The Bottom Line

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

# Submissions By Topic

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# Accept Rate by Topic

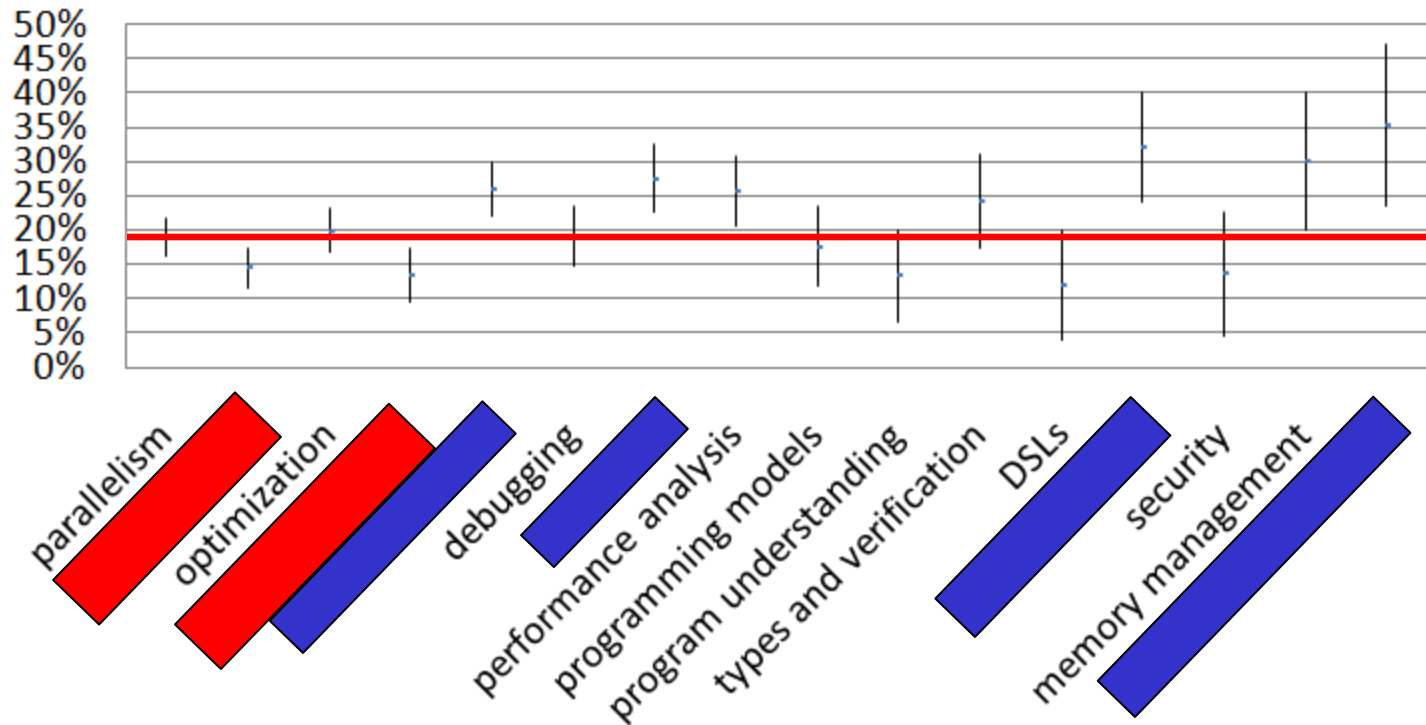
Key:

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 ccept rate +/- 2 papers*



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

The Health of the Field

# A Conversation

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- "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

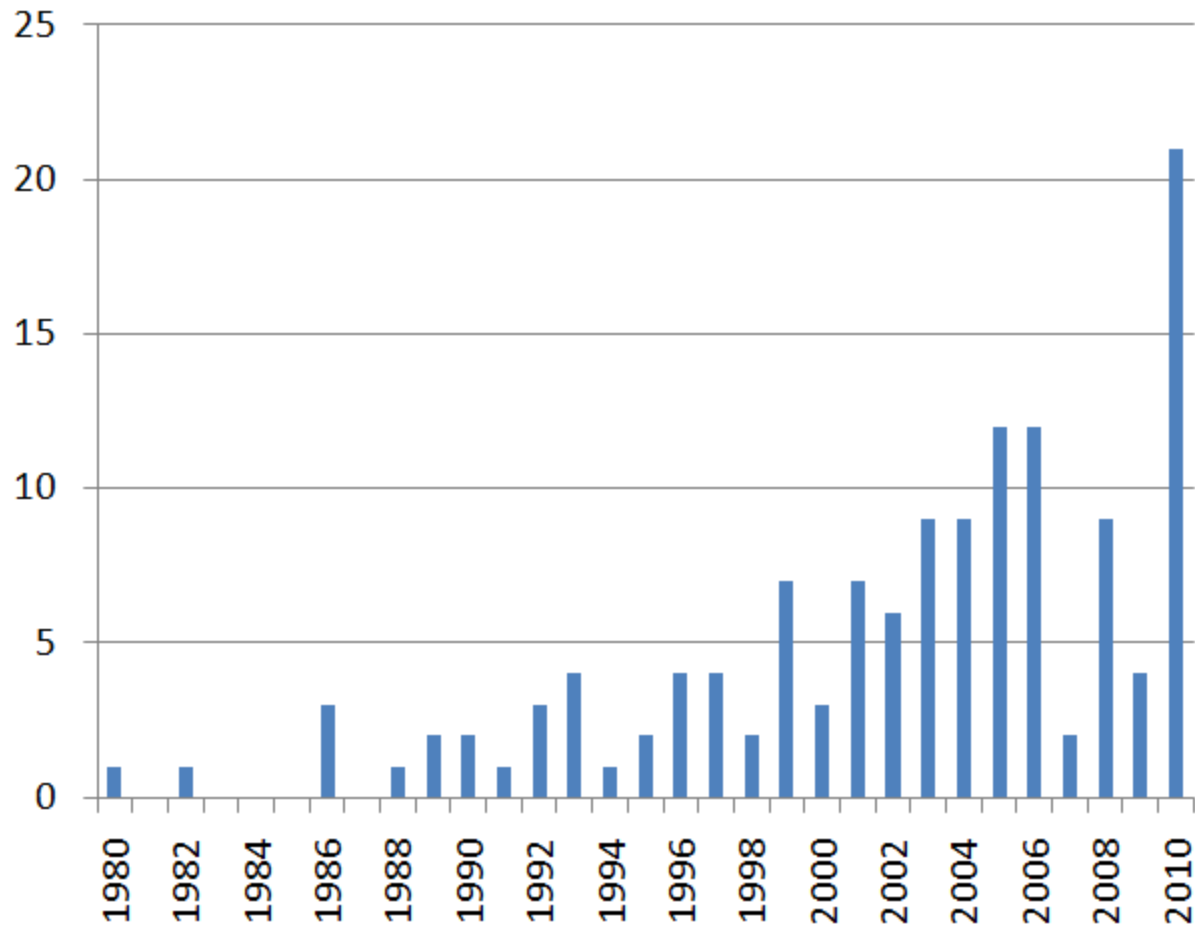
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- Standard measures
  - Papers, citations, conferences
  - All look healthy
  - But these are lagging indicators
- People
  - Is the field attracting new talent?
  - Predictive of activity in the future

# Year of 1<sup>st</sup> Paper for PLDI'10 Authors

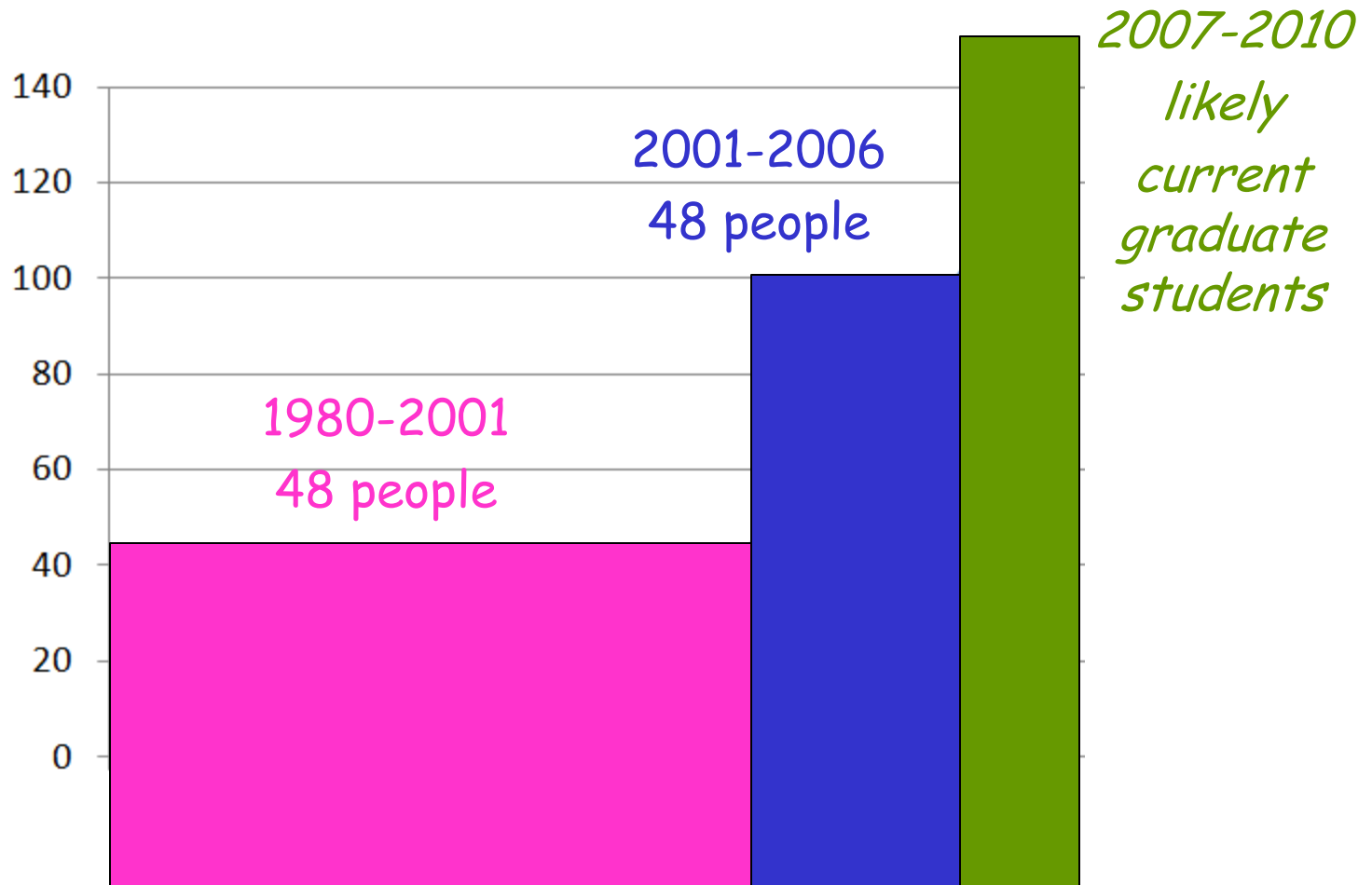
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Graph shows number of PLDI'10 authors who published their first scientific paper (in any forum according to DBLP) in a given year.



# Cumulative Plot

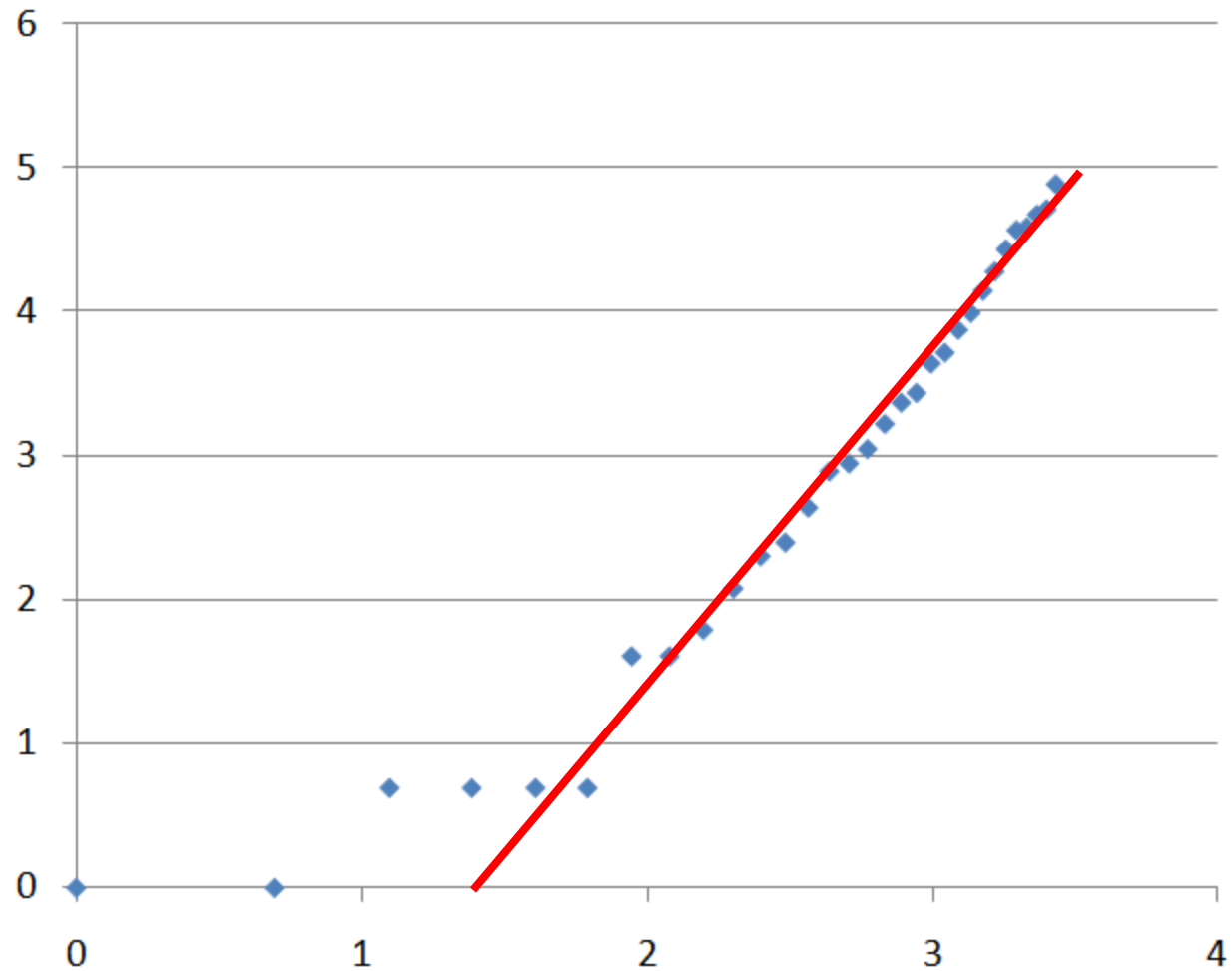
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Conclusion: The field's pipeline is healthy!

# Log-Log Plot

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# What Does This Mean?

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- 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

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



# Conclusions

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- 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