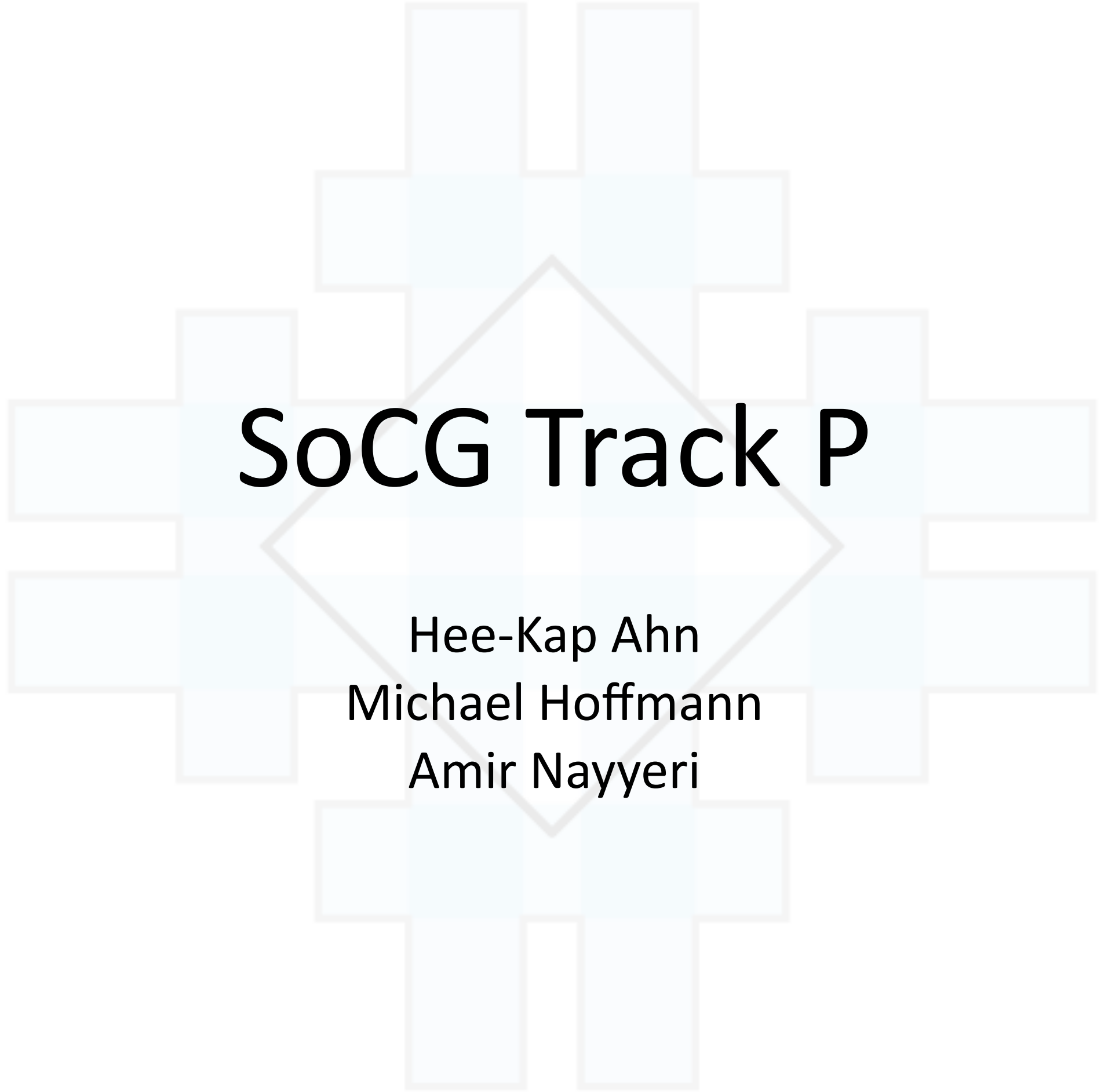




SoCG Track P

Hee-Kap Ahn
Michael Hoffmann
Amir Nayyeri

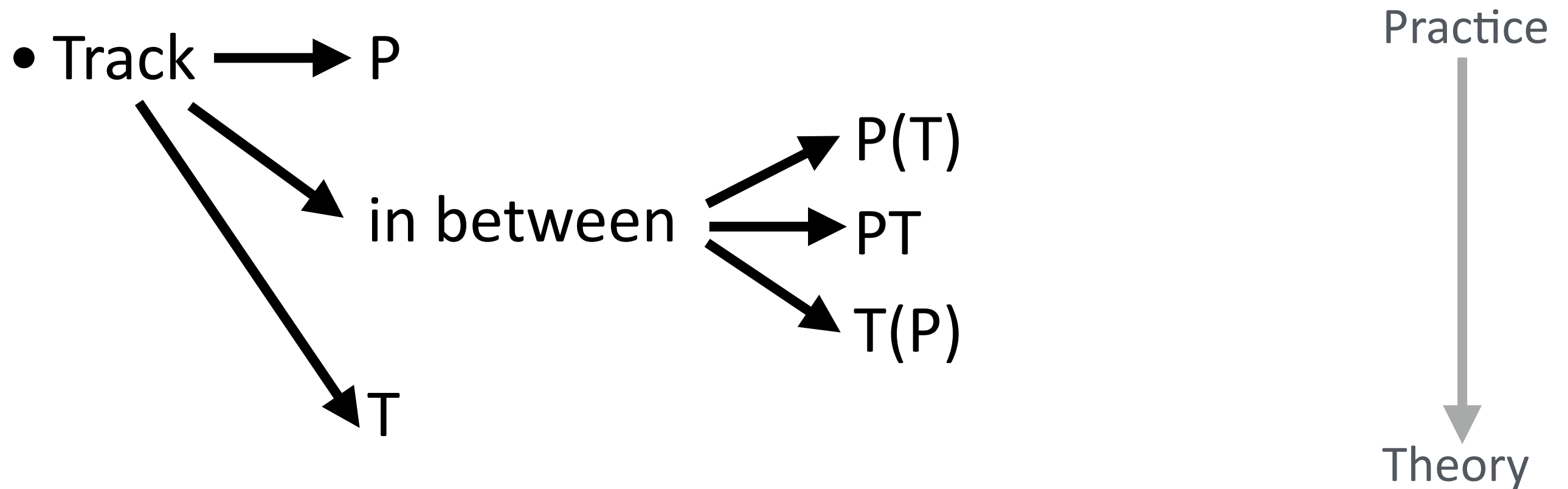
Outline

- **What** did we do and **why** did we do it this way?
 - Interplay between tracks
 - Challenges
- Role of code and data sets:
 - availability, verifiability, reproducibility
- What should authors know when submitting?

How to Track P

- Two tracks, but only **one SoCG**
- Tightly integrate new track w.r.t. submission, decision, and publication process, conference schedule
- **Chairs did everything together**
- Design everything with **both tracks** in mind:
 - Documents (CfP, review guidelines, PC briefings, ...)
 - Submission and review forms
 - Decision process (accept/reject/awards)
- **Separate** (mostly): PC recruiting, review process

Submission Data



- Interdisciplinary Contribution
- Area (Geometry, Topology), Paper Type, Topics (35)
- Abstract, Paper, Supplemental Data, Conflicts
- Simultaneous submission to journal?
- Student paper?

Submission & Review Process



Goal: Give **authors agency** to declare contributions concisely and descriptively
=> easier to find **suitable reviewers**.



NOT: Sort submissions into boxes
=> narrow the scope of the evaluation.

Reviewers may judge contribution differently => **shift evaluation** towards the strengths (“switch tracks”).

Call for **openness** w.r.t. type of contribution, topics, methods, connections to other fields, etc.

Track Alignment

Aim for three independent reviews.

- P : three reviews by P committee 
- P(T) : two reviews by P and one by T 
- PT : the PC decides 
- T(P) : one review by P and two by T 
- T : three reviews by T committee 

Connections beyond CG&CT

Problem: The term “application” is too overloaded and too narrow at the same time; it is **orthogonal** to area, track, topic, and paper type.

Changes to paper types:

- no paper type “Applications” anymore
- split “Experiments & Implementation” in two types

Treat contributions that involve **connections** from/to other fields and application domains as a separate new top-level category **Interdisciplinary Work**.

—> optional textfield in submission and review form

Decision Process



Round 1–3: Unanimous decisions by six people (3 PC members + 3 chairs).

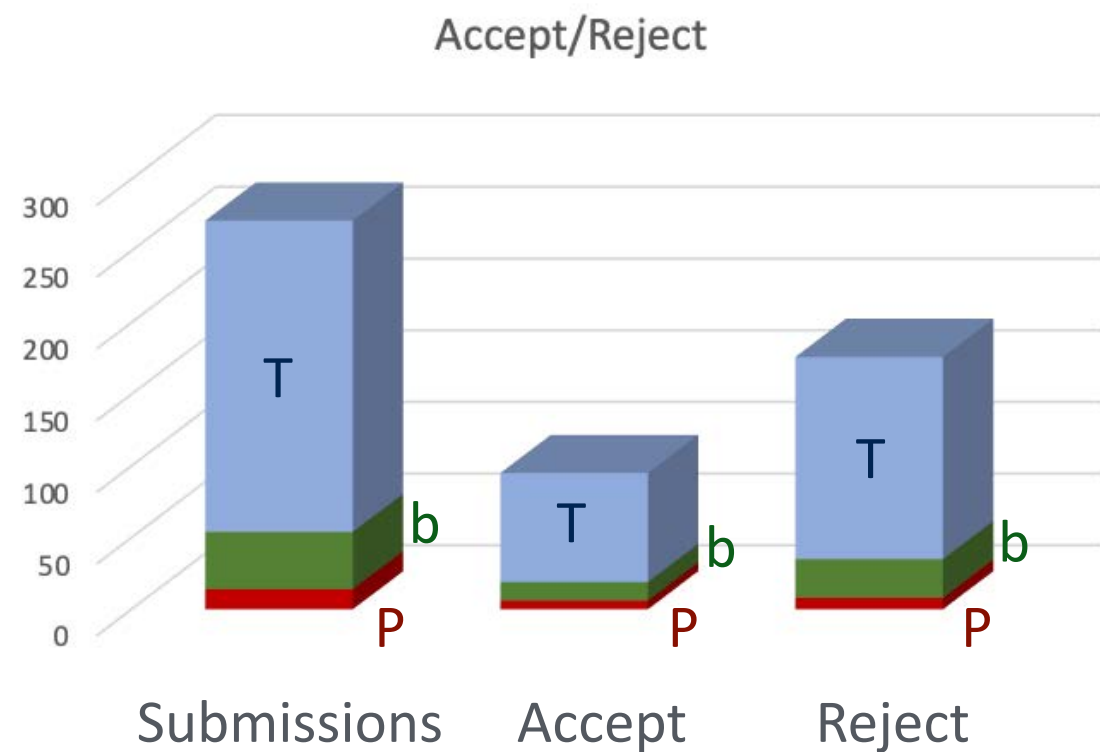
Goal: Find 1st half of accepted papers, reduce pool so that half of the remaining papers can be accepted.

Decision Process



Final phase: Discuss the remaining papers until reaching a decision. For each paper accepted, reject another one. In this phase, also consider balance of topics, tracks, etc. Last three papers decided in a meeting with the involved PC members.

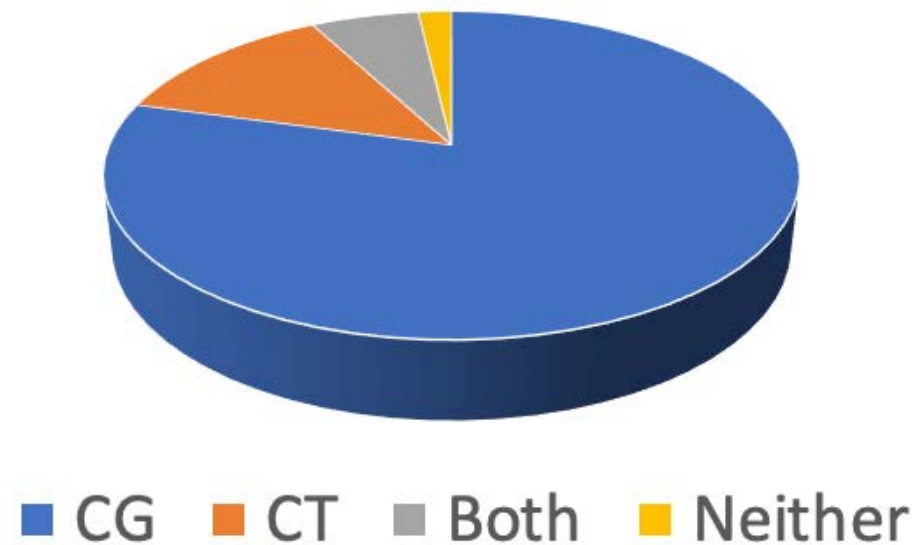
Results



	Submissions	Accept	Ratio
T	217	76	35.0%
between	40	13	32.5%
P	14	6	42.9%
Total	271	95	35.1%
2025	225	78	34.7%
2024	235	83	35.3%
2023	175	61	34.9%
2022	174	64	36.8%
2021	164	58	35.3%

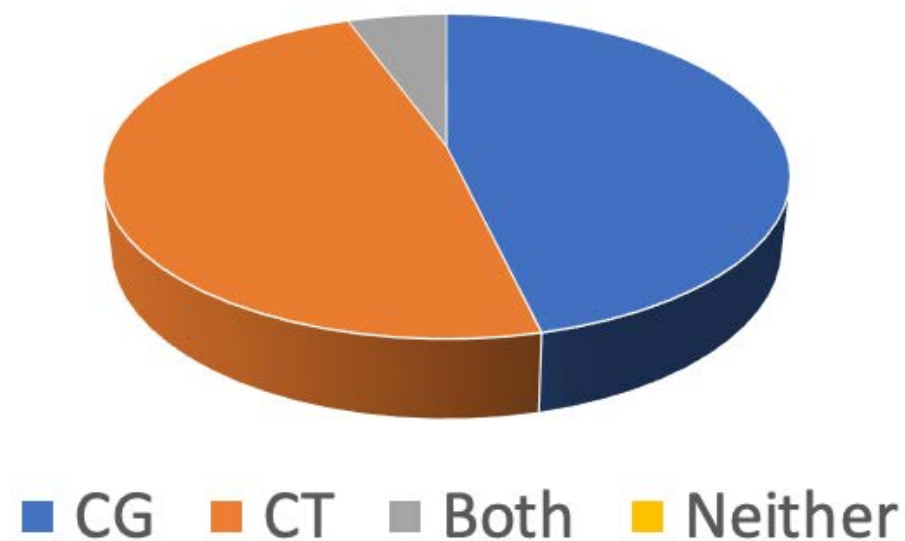
Areas and Tracks

Track T: Submissions by Area



	Submissions	Accepted	Ratio
CG	172	59	34.3%
CT	28	9	32.1%
Both	13	7	53.8%
Neither	4	1	25.0%
Total	217	76	35.0%

Track P+: Submissions by Area



	Submissions	Accepted	Ratio
CG	25	6	24.0%
CT	26	12	46.2%
Both	3	1	33.3%
Neither	0	0	0.0%
Total	54	19	35.2%

Challenges

- **meta discussions**: what is this track? Is it ok if the main contribution is (code/data/...)?
Our answer: Focus on **quality** of contribution over type and formal criteria. Is it interesting, novel, correct, well motivated, well presented, [...]? => **yes**
- **baseline**: there is always another one to ask for, but comparisons can be difficult or impossible if detailed information is not available
- **anonymization**: not only repository but also the data inside must be anonymized

Reproducibility

- publish —> making things public
Not just statements but also how to **obtain**, **verify**, **reproduce**. Even tiny details can matter.
- If contribution is an implementation => code and data must be available, to reviewers and to future readers.
 - —> integrity and long-term health of the field
 - future work can build on and use as a baseline
 - authors may receive useful feedback
- If data sets cannot be published (e.g., due to legal reasons), design generators for “similar” synthetic data (can be a valuable contribution in itself).

Recommendations for Authors

- **Baseline**: consider and compare to natural choices; argue if you disregard one of those.
- **Validation & verification** is very important.
Every paper with experimental results should include a section "**Threats to validity**" that discusses the measures taken to ensure correctness of the code and possible biases in the measurements.
Include the corresponding code into the submission.
- **Polish** your code, experiments, and documentation; (some) reviewers will study these.

Outlook

- **Use of AI/LLMS**: ask authors for a statement, both for text (paper) and code/data (suppl. material)
- Give Track P some **time to evolve** and develop a community --> infuse SoCG with new ideas, directions, and knowledge about practical aspects

Thanks to PC:

Track P:

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Track T:

Eyal Ackerman
Hee-Kap Ahn
Pankaj Agarwal
Martin Balko
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Therese Biedl
Kevin Buchin
Sergio Cabello
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Anne Driemel
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Track T (cont):

Hung Le
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Yakov Nekrich
Sharath Raghvendra
Paweł Rzążewski
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Shin-ichi Tanigawa
Katharine Turner
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