Organizing the
Mathematical Literature
On the Road to MSC 2020

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History and Aims of MSC

- jointly produced by MR and zbMATH
- dates back to 1940s, official revisions every decade starting from 1990
- used by zbMATH and MR for internal workflow
- libraries use it for classifying journals and books
- search by area or keyword
- filter search results
- community driven
HITS tried Topic Modeling on zbMATH reviews using ToPMine.

**Results:** some meaningful topic clusters in applied areas, useless for pure mathematics

- Bayesian inference, posterior distribution, Gibbs sampler (62F15)
- pull back, container loading (category theory vs. operations research)
- hyperplane arrangement, traffic jam, speed of light (???)
Current Status and Timeline

01/2015 – 06/2016
internal discussions, informal announcement

07/2016 – 08/2018
msc2020.org open for comments

09/2018 – 12/2019
incorporation of community feedback

01/2020
MSC2020 goes into effect
How Much Change is Needed?

Comparing human-awarded MSC codes zbMATH $\leftrightarrow$ MR:

<table>
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<th>Level</th>
<th>$F_1$</th>
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<tbody>
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<tr>
<td>2</td>
<td>0.72</td>
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<td>3</td>
<td>0.58</td>
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</tbody>
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$\rightarrow$ no need for new top-level codes in MSC2020 (and few second-level ones).
Selected Highlights from Current Suggestions

**14Q** (Computational aspects in algebraic geometry):
- Numerical algebraic geometry

**18D** (Categories with structure):
- Higher categories

**55U** (Applied homological algebra and category theory):
- Topological data analysis

**62** (Statistics):
- Algebraic Statistics

**68** (Computer science):
- Computer-assisted proofs
What Can I Do?

Contribute!

https://msc2020.org/
open until after the ICM

And tell your colleagues!