

THE COVID-19 RESEARCH OUTBREAK

HOW THE PANDEMIC CULMINATED IN A SURGE OF NEW RESEARCHERS

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COVID-19 AND THE SCIENTIFIC COMMUNITY

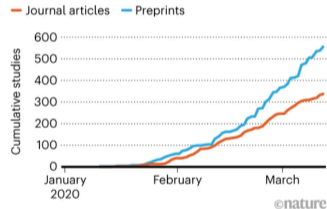
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CORONAVIRUS RESEARCH

Hundreds of studies about the virus have been published since the outbreak began.

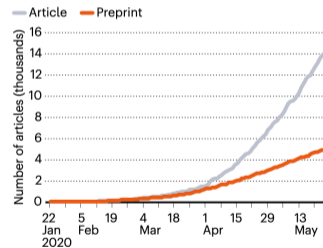


COVID-19 AND THE SCIENTIFIC COMMUNITY

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- ◆ Community coalesced around COVID-19 research
- ◆ New researchers involved in outbreaks and infectious diseases discourse

TORRENT OF PREPRINTS

Around one-quarter of the scientific articles that relate to COVID-19 are preprints, by one estimate. Many appeared at medRxiv, a site for medical preprints, which has grown hugely as a result of the pandemic. Some were posted on bioRxiv and other preprint servers.



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- ◆ Is such an explosive growth of a field *healthy*?
 - In emergency situations?
 - In non-emergencies?

SETUP

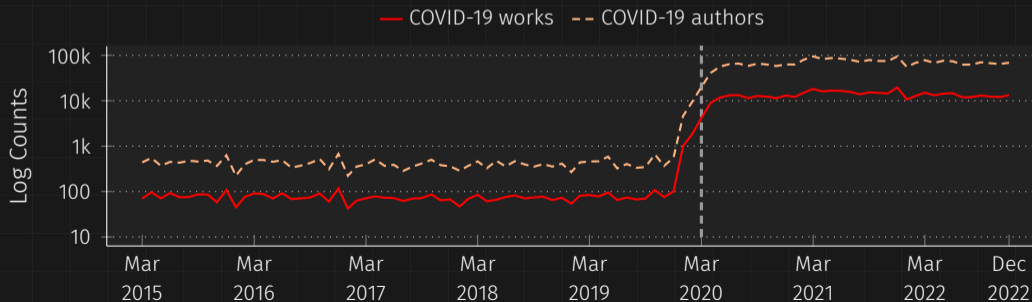
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COVID-19 PUBLICATIONS IN NUMBERS

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◆ *Core* topics: COVID-19, SARS-CoV-2, 2019-2020 COVID-19 outbreak

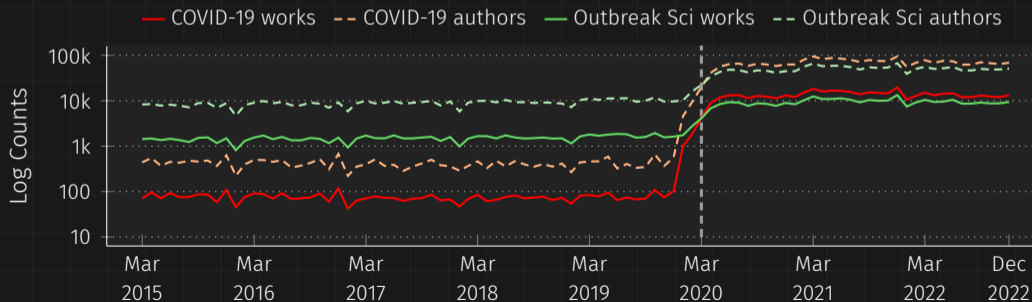


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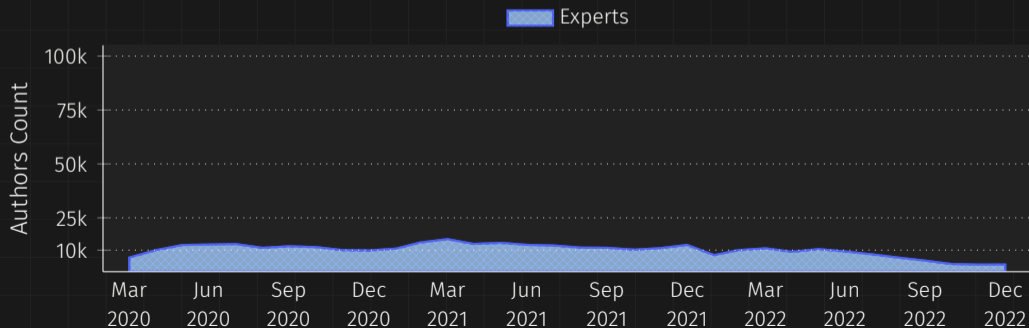
- ◆ *Core* topics: COVID-19, SARS-CoV-2, 2019-2020 COVID-19 outbreak
- ◆ *Outbreak Science* topics: Outbreak, Infectious Diseases, Pandemic, Epidemic



SURGE OF AUTHORS IN COVID-19 RESEARCH

AUTHOR TYPES

Experts Prior publications on Outbreak Science or core topic(s) during TW

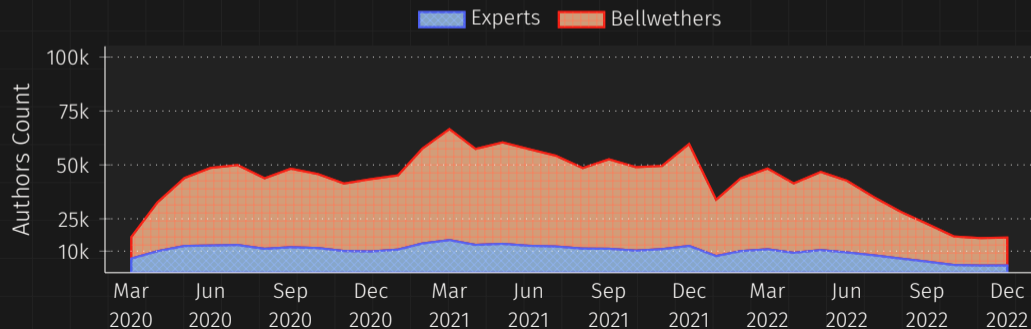


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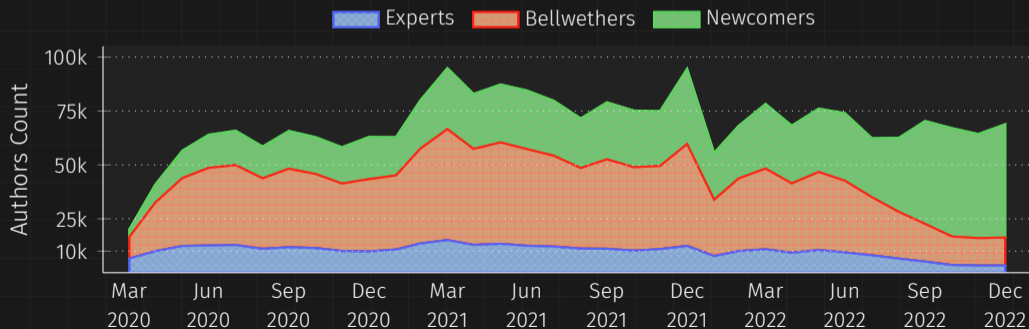
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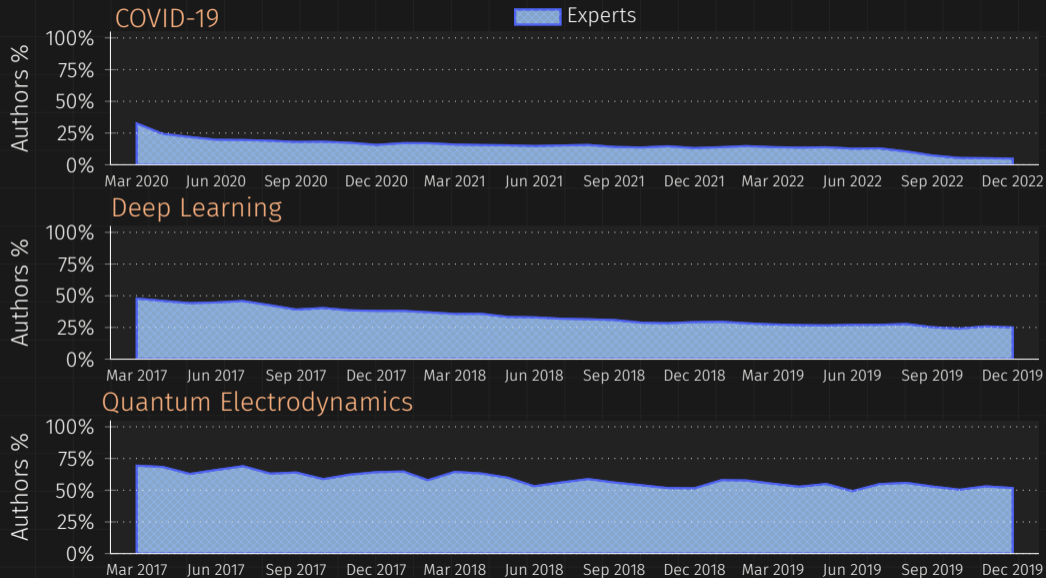
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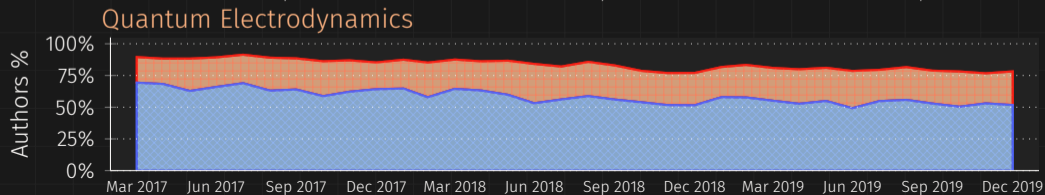
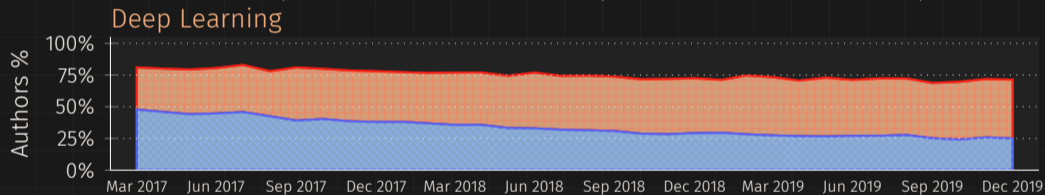
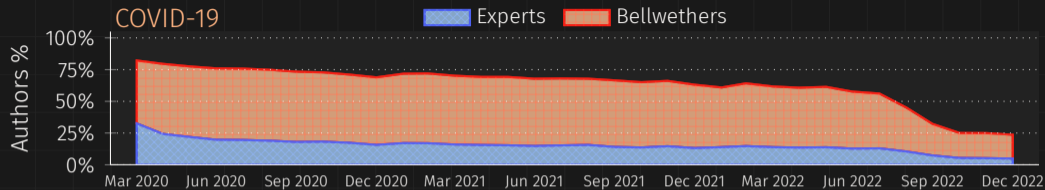
Newcomers No prior publications during TW



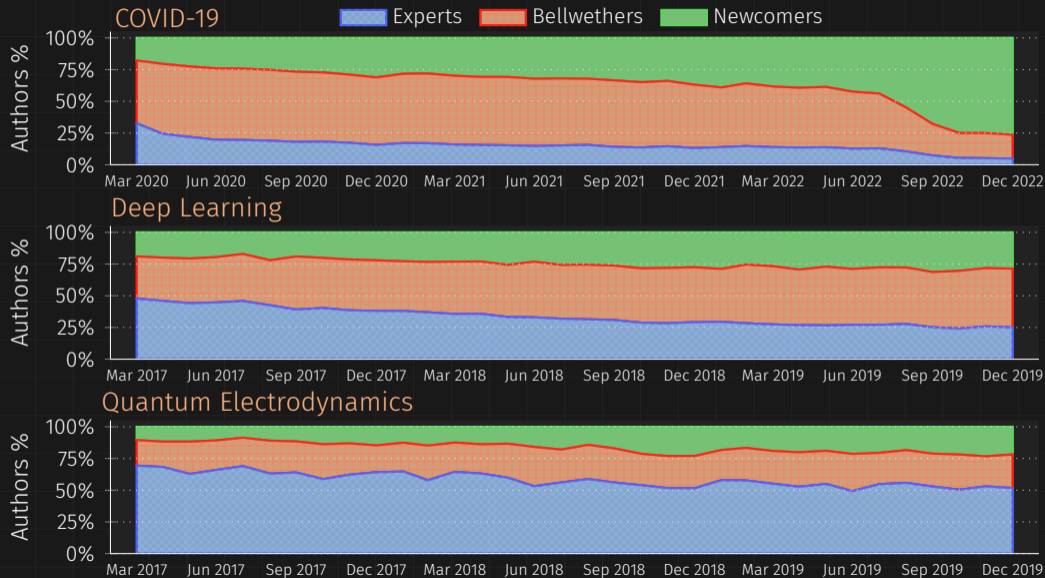
INFLUX IN CONTEXT



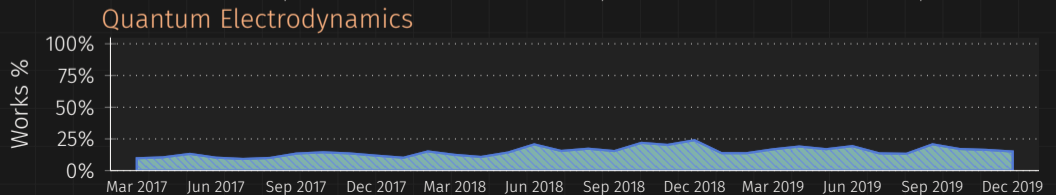
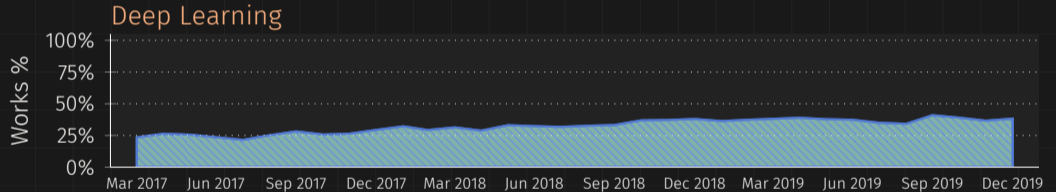
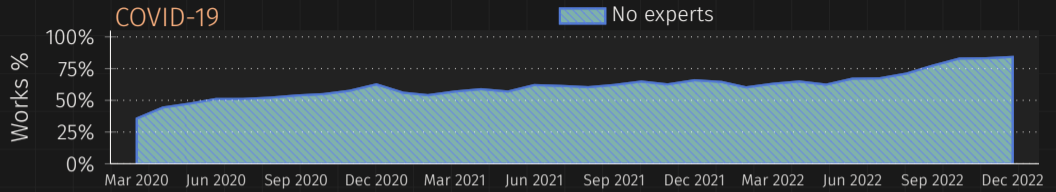
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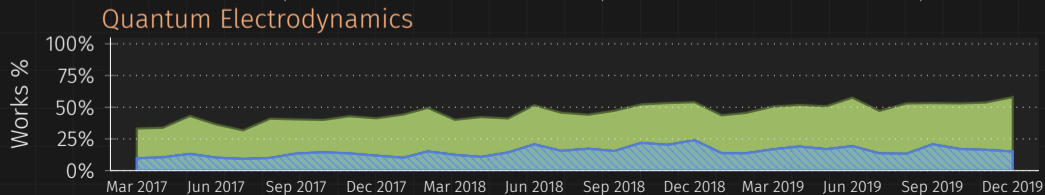
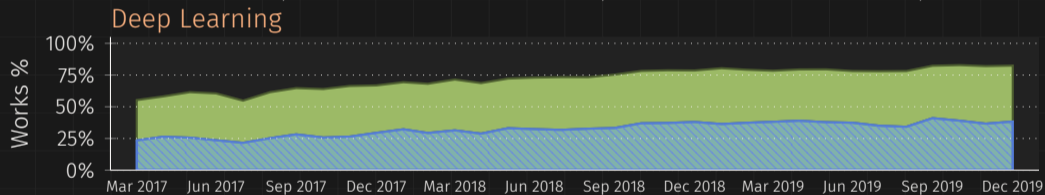
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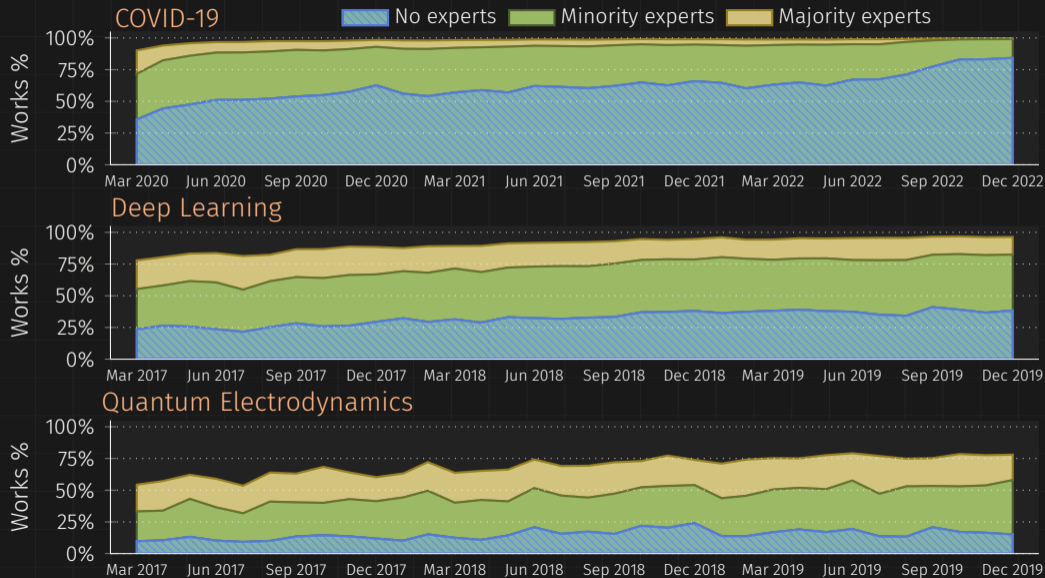
WORK TYPES



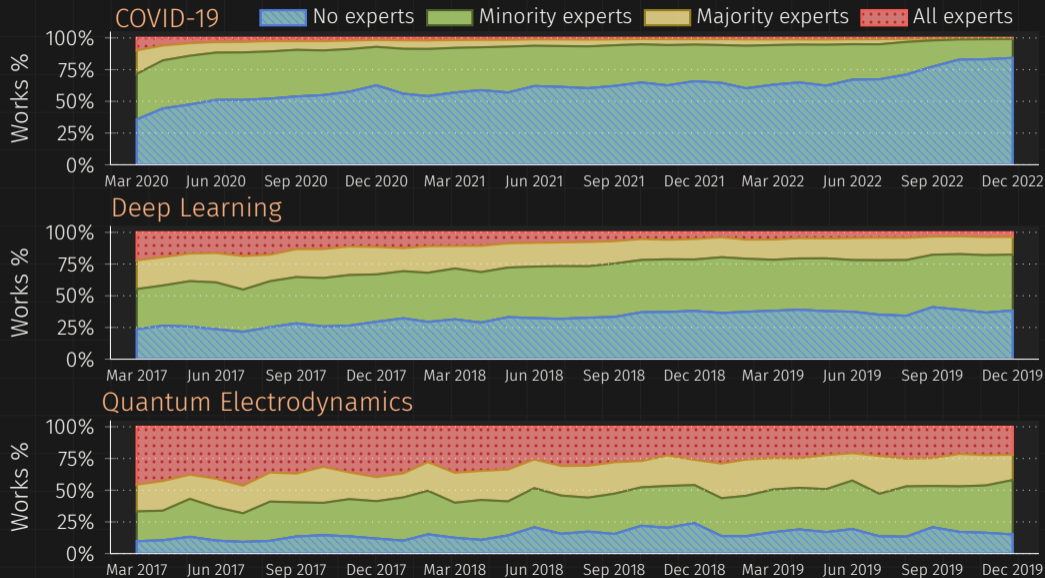
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CONCLUSIONS

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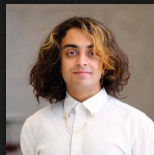
- ◆ Linking *scientific discourse* with real-world events
- ◆ Studying *collaboration habits* of newcomers and bellwethers
- ◆ Understanding *semantic shifts* in author research directions



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University of Padova



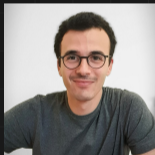
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Thanks!

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