Measuring Similarity Between Mathematics Research and Its References Using Bibliographic Coupling

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http://hdl.handle.net/2027.42/150102
Using? Interdisciplinary Applications were included in the analysis.

Mathematics; Mathematics, Applied Mathematics; and Mathematics, 1900-2017. All records with Web of Science category designations

The data used is from the Clarivate Web of Science citation database,

Why? An analysis of the development of mathematics research overtime,

In order to understand mathematics it is important to develop knowledge of how it has grown and the ways it builds on itself.

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What? An analysis of the development of mathematics research overtime, with a focus on similarity between publication-reference and citation-publication pairs.

How? Similarity between publication pairs is measured using raw and proportional Bibliometric Coupling strength. Raw strength is the number of publications in the intersection of reference sets. The proportional strengths takes the raw counts and divide them by sizes number of publications in the intersection of reference sets. The data used is from the Clarivate Web of Science citation database, with a focus on similarity between publication-reference and citation-publication pairs.

For references and a work-in-progress paper please visit tinyurl.com/shbibpapersla2019