



To: CNPq Mathematics and Statistics Panel, Brazil

From: SIAM and co-signatories below

Date: November 2, 2020

Subject: Request for reassessment of SIAM journal rankings in Brazil

Dear esteemed colleagues,

SIAM (Society for Industrial and Applied Mathematics) is an international community of 14,500+ individual members. Incorporated in 1952 as a nonprofit organization, SIAM fosters the development of applied mathematics, computational science and data science worldwide to solve many real-world problems.

SIAM is aware that Brazilian mathematics is very strong and in 2018 Brazil was promoted to the top Group 5 of the IMU (International Mathematical Union). SIAM is proud to have many close connections to Brazilian mathematics – SIAM has over 100 members and editors from Brazil, and has published articles from 130+ Brazilian authors in the last 5 years. There are also SIAM student chapters at Brazilian universities.

SIAM's impact on research takes place through 18 high-level peer-reviewed scientific journals, a comprehensive and highly respected book program, as well as by organizing leading applied mathematics conferences in the US and abroad.

A strong Applied Mathematics academic and industry community in Brazil that is able to reach out internationally is vital to maximize the impact of Brazilian mathematics on society both in Brazil and globally. One key way that Brazilian researchers have that impact is by publishing high-level research articles in highly cited, highly respected journals such as the SIAM journals.

Recently, SIAM became aware of new journal evaluations in Brazil, which impact both graduate programs as well as individual scientific funding. Initially journals were evaluated according to the Qualis platform from CAPES (at the Ministry of Education) – under this system nearly all SIAM journals were classified in the top two tiers, namely **Qualis A1 and A2**.

However, we understand recently the Mathematics panel at CNPq (at the Ministry of Science, Technology and Innovation) has made changes in the journal classification, ranking journals into five groups on an exponential scale (where Group 1 counts 2x as much as Group 2 and 7x as much as Group 3).

Brazilian researchers have raised concerns that this new system appears to have downgraded SIAM journals in a way that is not accurate based on the journal quality. For example, while *SIAM Journal on Applied Dynamical Systems* is ranked A2 by Qualis, it is only ranked in Group 3



under this new system. Some SIAM journals do not even appear within the new classification table.

SIAM also became aware that the MCQ (Mathematical Citation Quotient) metric from the AMS (American Mathematical Society) was used by the CNPq panel for evaluation purposes. However, the MCQ is based on a restricted list of journals chosen by the AMS and so it excludes citations in other relevant journals, particularly in other disciplines. This contradicts the multidisciplinary strategic role of mathematics. As mentioned, the strength of mathematics is maximized when it interacts with other fields as well.

With this in mind, SIAM and the undersigned Brazilian researchers respectfully ask for the SIAM journals to be reevaluated in a way that more accurately reflects their high quality and high standing. We also request that a ranking is assigned to all the SIAM journals as some are missing currently – a full list of titles is attached in Appendix A.

SIAM is very open to interacting further with Brazilian leadership in mathematics and fostering the Brazilian community around applied math, computational science and data science.

We would look forward to your reply and of course would be delighted to discuss this matter further.

Kind regards,

Howard Elman
SIAM Vice President for Publications
University of Maryland

Kivmars Bowling
Publications Director, SIAM
3600 Market Street, Floor 6, Philadelphia, PA 19104, USA
+1 267-350-6377
bowling@siam.org

Co-signatories

- Pablo Domingues (UFPe), President of SBMAC (Sociedade Brasileira de Matemática Aplicada e Computacional)
- Helena Lopes (UFRJ)
- Dan Marchesin (IMPA)
- André Nachbin, (IMPA)
- Carlos Tomei (PUC)



Appendix A: List of SIAM Journals

1. Multiscale Modeling and Simulation (MMS)
2. SIAM/ASA Journal on Uncertainty Quantification (JUQ)
3. SIAM Journal on Applied Algebra and Geometry (SIAGA)*
4. SIAM Journal on Applied Dynamical Systems (SIADS)
5. SIAM Journal on Applied Mathematics (SIAP)
6. SIAM Journal on Computing (SICOMP)
7. SIAM Journal on Control and Optimization (SICON)
8. SIAM Journal on Discrete Mathematics (SIDMA)*
9. SIAM Journal on Financial Mathematics (SIFIN)*
10. SIAM Journal on Imaging Sciences (SIIMS)
11. SIAM Journal on Mathematical Analysis (SIMA)
12. SIAM Journal on Mathematics of Data Science (SIMODS)*
13. SIAM Journal on Matrix Analysis and Applications (SIMAX)
14. SIAM Journal on Numerical Analysis (SINUM)
15. SIAM Journal on Optimization (SIOPT)
16. SIAM Journal on Scientific Computing (SISC)
17. SIAM Review (SIREV)
18. Theory of Probability and its Applications (TVP)*

*These journals are missing from the CNPq rankings