

Center for Mathematical and Applied Research

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Publications

Article

The free boundary for a superlinear system

H. Shahgholian, D. Se Silva, S. Jeon

Journal of Functional Analysis 2026 1-23

<https://www.scopus.com/pages/publications/105030027447?origin=resultslist>

Article

Scattering in corner domains with anisotropic inhomogeneities: the degenerate Bernoulli case

Pu-Zhao Kow, Mikko Salo, Henrik Shahgholian

Journal of Mathematical Analysis and Applications 2026 130630

<https://doi.org/10.1016/j.jmaa.2026.130630>

Article

Constraint Maps: Insights and Related Themes

Alessio Figalli, André Guerra, Sunghan Kim, Henrik Shahgholian

La Matematica 2026 26

<https://doi.org/10.1007/s44007-026-00209-w>

Article

Partial Regularity of the Gradient for Subsolutions

Henrik Shahgholian, Hakobyan A., Poghosyan M.

Bulletin of the Brazilian Mathematical Society New Series 2026 1-17

<https://doi.org/10.1007/s00574-026-00519-1>

Article

Multiphase quadrature domains (existence and uniqueness)

Henrik Shahgholian, Kow Pu-Zhao, Sjödin, Tomas

Analysis and Mathematical Physics 2026

Article

The free boundary for semilinear problems with highly oscillating singular terms

Mark Allen, Dennis Kriventsov, Henrik Shahgholian

Journal of the London Mathematical Society 2025 e70180

Article

A Vectorial Free Boundary Transmission Problem (A Short Exposition)

Shahgholian Henrik, Seongmin Jeon

Trends in Mathematics 2025 47--52