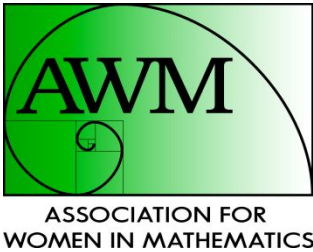


November 25, 2018



Ebru Toprak and Jiuya Wang Win 2019 AWM Dissertation Prize



Ebru Toprak and Jiuya Wang will be presented with the 2019 AWM Dissertation Prize at the AWM Reception and Awards Presentation at the 2019 Joint Mathematics Meetings in Baltimore, MD.

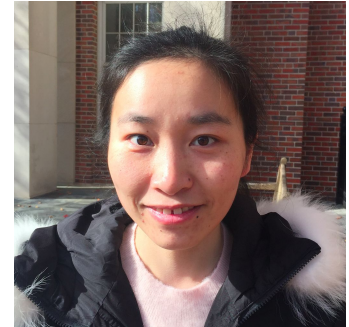
Ebru Toprak obtained her PhD in 2018 from the University of Illinois at Urbana-Champaign under the direction of Burak Erdogan. Her work has been recognized through numerous awards, including the 2017 James D. Hogan Memorial Scholarship Fellowship from UIUC, and the 2017 Waldemar J., Barbara G. and Juliette Alexandra Trjitznsky Fellowship from UIUC. Ebru is visiting the Mathematical Sciences Research Institute in Berkeley until December 2018. After her visit, she will join Rutgers University as a Hill Assistant Professor.

Ebru's research interests are in harmonic analysis and dispersive PDE. Her dissertation provides new decay estimates for the potentials of the linear Schroedinger operator and of the linear massive Dirac operator in endpoint Lebesgue spaces setting, in dimensions 2 and 3 and under suitable assumptions on the threshold energies. Ebru's work has led to several publications, including the single-authored paper *Schroedinger and wave equations with resonance of the first kind at zero*, *J. Spectr. Theory* 7 (2017), 1235-1284, and the paper *Dispersive estimates for Dirac operators in dimension three with obstructions at threshold energies*, with B. Erdogan and W. Green, to appear in the *American Journal of Mathematics*.

Her results are deemed "surprising," her collaborators acknowledge that "[they] have benefited and continue to benefit greatly from working with [her]," that she has already made

"several important contributions on notably difficult problems in PDEs."

Jiuya Wang received her PhD in 2018 under Melanie Matchett Wood at the University of Wisconsin Madison. She is now a Phillip Griffiths Assistant Research Professor and Foerster-Bernstein Fellow at Duke University. She has received several honors and awards for her research and teaching contributions.



Jiuya works in arithmetic statistics, a branch of number theory. In her Ph.D. thesis she proved Malle's conjecture for infinitely many non-abelian Galois groups. Malle had conjectured an asymptotic formula, which was later refined, for the number of degree n extensions K over \mathbb{Q} with Galois closure having Galois group G . Malle's conjecture is still a central question in arithmetic statistics. The letter writers describe her work as "beautiful", and "impressive". One writes that her work "is a serious analytic accomplishment and I expect it to be published in a top number theory journal". Another writes "Dr. Wang also has many further ideas to use her unique mastery of these subjects, as developed in her thesis, to study related problems" and that "she has already made significant advances in these directions as well." The letter writers concur that her thesis demonstrates a high level of ingenuity, originality and technical mastery. In addition, they expect many applications to the field of arithmetic statistics from the methods she developed in her dissertation.

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