

# INTERACTIONS BETWEEN HARMONIC ANALYSIS, HOMOGENEOUS DYNAMICS, AND NUMBER THEORY

Hot Topics Workshop  
MSRI/SLMath, March 3 to 7, 2025

- [1] V. BLOMER, E. FOUVRY, E. KOWALSKI, P. MICHEL, D. MILIĆEVIĆ, and W. SAWIN, *The second moment theory of families of  $L$ -functions: the case of twisted Hecke  $L$ -functions*, **282**:1394 *Memoirs of the American Mathematical Society* no. 1394, American Mathematical Society, Providence, RI, 2023, ISBN 978-1-4704-5678-8; 978-1-4704-7350-1. [MR](#) [Zbl](#)
  
- [2] C. DEMETER, *Fourier restriction, decoupling, and applications*, *Cambridge Studies in Advanced Mathematics* **184**, Cambridge University Press, Cambridge, England, 2020, ISBN 978-1-108-49970-5. [MR](#) [Zbl](#)
  
- [3] M. EINSIEDLER and T. WARD, *Ergodic theory with a view towards number theory*, *Graduate Texts in Mathematics* **259**, Springer, Cham, Switzerland, 2011. [MR](#) [Zbl](#)
  
- [4] S. FERENCZI, J. KUŁAGA-PRZYMUS, and M. LEMAŃCZYK (eds.), *Ergodic theory and dynamical systems in their interactions with arithmetics and combinatorics*, *Lecture Notes in Mathematics* **2213**, Springer, Cham, Switzerland, 2018, ISBN 978-3-319-74907-5; 978-3-319-74908-2. [MR](#) [Zbl](#)
  
- [5] L. GUTH, *Polynomial methods in combinatorics*, *University Lecture Series* **64**, American Mathematical Society, Providence, RI, 2016, ISBN 978-1-4704-2890-7. [MR](#) [Zbl](#)