

Follow-Up-Workshop to TP
“The Next Horizon: Workshop on Open Problems in Harmonic
Analysis and Analytic Number Theory”

April 28 - May 2, 2025

organized by
Valentin Blomer (Universität Bonn), Farrell Brumley (Université Paris 13), Philip
Gressman (University of Pennsylvania, Philadelphia), Marina Iliopoulou (University of
Athens), Lillian B. Pierce (Duke University)

Time measurement: CEST

• **Monday, April 28**

08:30 - 09:00	<i>Arrival and Self-Registration</i>
09:00 - 09:05	<i>Welcome by HIM Director Theo Sturm</i>
09:05 - 10:05	James Maynard <i>Large values of Dirichlet polynomials and the zeta function</i>
10:05 - 11:00	<i>Coffee and discussion</i>
11:00 - 12:00	Maksym Radziwiłł <i>Where we get stuck on the 12th moment of the Riemann zeta function</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 14:45	Informal Discussion
14:45 - 15:45	Dominique Maldague <i>Difficulty of using decoupling ideas for generalized Dirichlet series and cubic Weyl sums</i>
16:00	<i>Coffee and discussion</i>
from 18:00 on	<i>Get-Together</i>

- **Tuesday, April 29**

09:00 - 10:00	Ben Green <i>Properly understanding why nilpotent groups are important in additive combinatorial problems</i>
10:00 - 11:00	<i>Coffee and discussion</i>
11:00 - 12:00	Sarah Peluse <i>Inverse theorems for multidimensional Gowers norms</i>
12:00 - 14:00	<i>Lunch break</i>
15:15 - 16:15	Hong Wang <i>(Hausdorff Colloquium at University of Bonn Mathematical Institute, located in the Lipschitzsaal at Endenicher Allee 60)</i>
16:00	<i>Coffee available at the HIM</i>

- **Wednesday, April 30**

09:00 - 10:00	Philippe Michel <i>Short sums of trace functions: examples, conjectures and applications (part 1)</i>
10:00 - 11:00	<i>Coffee and discussion</i>
11:00 - 12:00	Emmanuel Kowalski <i>Short sums of trace functions: examples, conjectures and applications (part 2)</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 14:45	Informal Discussion
14:45 - 15:45	Hong Wang <i>Danzer's problem and quantitative Besikovitch projection theorem</i>
16:00	<i>Coffee and discussion</i>

- **Thursday, May 1**

09:00 - 10:00	Betsy Stovall <i>Discrete vs continuum incidence problems</i>
10:00 - 11:00	<i>Coffee and discussion</i>
11:00 - 12:00	Rachel Greenfeld <i>Heil-Ramanathan-Topiwala Conjecture in time frequency analysis</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 14:45	Informal Discussion
14:45 - 15:45	Po Lam Yung <i>Discrete restriction in $2+1$ vs $1+1$ dimensions</i>
16:00	<i>Coffee and discussion</i>

• **Friday, May 2**

09:00 - 10:00	Damaris Schindler <i>Density of rational points near manifolds</i>
10:00 - 11:00	<i>Coffee and discussion</i>
11:00 - 12:00	Trevor Wooley <i>The paucity of knowledge concerning Weyl sums and their mean values</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 16:00	Informal discussion
16:00	<i>Coffee and discussion</i>