

Emergent Research:

The PIMS Postdoctoral Fellow Seminar



Pacific Institute *for the*
Mathematical Sciences

November 22, 2023 | 9:30am Pacific

Around Artin's primitive root conjecture

ABSTRACT:

In this talk we will first discuss this soon to be 100 years old conjecture, which states that the set of primes for which an integer a different from -1 or a perfect square is a primitive root admits an asymptotic density among all primes. In 1967 Hooley proved this conjecture under the Generalized Riemann Hypothesis.

After that, we will look into a generalization of this conjecture, where we don't restrain ourselves to look for primes for which a is a primitive root but instead elements of an infinite subset of \mathbb{N} for which a is a generalized primitive root. In particular, we will take this infinite subset to be either \mathbb{N} itself or integers with few prime factors.

For more information and registration:

<https://www.pims.math.ca/seminars/PIMSPDF>



Paul Péringuey

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SPEAKER BIO:

Paul Péringuey is a PIMS Postdoctoral fellow at the University of British Columbia where he is working with Prof. Greg Martin, under the sponsorship of the PIMS Collaborative Research Group "L-Functions in Analytic Number Theory". He obtained his PhD in 2022 at Université de Lorraine under the supervision of Cécile Dartyge. His area of research is in Analytic Number Theory, Comparative Prime Number Theory, as well as Additive Combinatorics.

ABOUT PIMS PDF SEMINARS:

PIMS ongoing lecture series featuring our Postdoctoral Fellows every three weeks. You will have the opportunity to connect with emerging research in the mathematical sciences from a PIMS Postdoctoral Fellow. PIMS PDFs are amongst the top young researchers in Canada, and this is an excellent opportunity to learn about them, and their work.



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