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Kempner Colloquium

TRANSCENDENTAL NUMBERS AND PERIODS

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As Cantor showed us, there are uncountably many transcendental numbers. Despite being overwhelmingly more numerous than algebraic numbers, it is not so easy to find them in Nature: we know, for example, that π is transcendental, but proving this is a major result. We will discuss these facts, then go on to discuss the Kontsevich-Zagier theory that most transcendentals belong to a countable class, the periods of integrals of algebraic functions with rational coefficients. Finally, we consider Yoshinagas number: a specific number that is not a period.

Tuesday February 10, 2015 12:10 PM - 12:50 PM MATH 350